USING WRAPAROUND TO MEET THE NEEDS OF STUDENTS WITH EMOTIONAL AND BEHAVIOURAL DIFFICULTIES AND DISORDERS

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ABSTRACT

There is considerable controversy in the research literature concerning meeting the needs of children and youth with Emotional and Behavioural Disorders (EBD). Collaborative models of service delivery have shown promising results in effectively meeting the needs of students with disabilities. The objective of this study was to examine the association between service providers' adherence to the fundamental elements of a collaborative process called Wraparound and measures of students' maladaptive behaviours, behavioural strengths, and functional impairment.

The current research investigated 23 students who were experiencing impaired functioning in the school, family, and/or community as a result of behavioural difficulties. Twelve of the students were engaged in Wraparound services and 11 were receiving conventional services. Adherence to the elements of Wraparound was determined using the Wraparound Fidelity Index (WFI; Bruns et al., 2005), a structured interview with the student's primary caregivers. Maladaptive behaviours, behavioural strengths, and functional impairment were assessed via the student's teachers completing the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992), Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004), and the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005), respectively. Results of this research indicated that, overall, the students who received Wraparound services showed higher fidelity to the elements of Wraparound and more favourable behavioural outcomes than did the students engaged in the conventional model of service delivery. The correlation analysis of the association between adherence to the elements of Wraparound and the student outcome measures showed mixed results. A strong association was observed with statistical significance for the element of Youth and Family Team on all three

outcome measures. This indicates the importance of an effective team in producing positive outcomes for the students and their families.

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DEDICATION

This thesis is dedicated to my children, Luke and Sasha,
who were born amidst the process.
Luke was a blessing in its commencement.
Sasha sang in its completion.
You are my source of forever happiness.

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Chapter 1: Introduction

The ultimate goal of education is for all students to achieve full and meaningful citizenship in society (Saskatchewan Education, 1999). During the last two decades, it has been a challenge to establish and sustain effective educational services for individuals with emotional and behavioural disabilities (e.g., identification and organization of relevant services, restrictive/exclusionary placements, interdisciplinary needs and obstacles, inconsistent practice and policy) (Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004; Eber, Sugai, & Smith, 2002; Kauffman, 2005). Historically, educational services for children and youth with Emotional and Behavioural Disorders (EBD) have not produced positive outcomes, and these students have consistently exhibited indicators of negative life outcomes (Bruns et al., 2004; Conway, 2003; Eber, Sugai, Smith & Scott, 2002; Kauffman, 2005). Compared with typical students and other disability groups, students with EBD have higher dropout rates, lower rates of graduation, poorer scores in math and reading, and are less likely to attend a post-secondary institute (Kauffman, 2005). Consequently, youth with EBD encounter difficulty finding employment and are prone to early involvement in the criminal justice system (U.S. Department of Health and Human Services, 1999).

One person alone does not have the skills or the knowledge to be able to plan and implement effective educational programs that can meet the academic, emotional, behavioural, and social needs of children and youth with emotional and behavioural disabilities (Snell & Brown, 2000). Collaborative processes have been emerging in the research literature as a critical characteristic of exemplary schools that have been effectively meeting the needs of students with disabilities (e.g., Friend, 2005; McLaughlin, 2002). An interactive team is needed to pool the

knowledge, skills, and resources of professionals, parents, and students to address the diverse challenges confronting these students and their families (Thomas, Correa, & Morsink, 2001).

1.1 Purpose of the Study

Wraparound is a collaborative intervention process in which a support network is established with individuals committed to supporting the student and his/her family (VanDenBerg & Grealish, 1998). Multiple studies on this process have demonstrated substantial improvements in academic, emotional, behavioural, and social functioning for children and youth with emotional and behavioural disabilities (e.g., Kendziora, Bruns, Osher, Pacchiano, & Mejia, 2001; Peterson et al., 2004). However, only recently has a consensus been reached regarding the operationalization of the Wraparound definition and its elements (Burns & Goldman, 1998). This ambiguity has led to varied implementation strategies by service providers. Research studies have focused on outcome without consideration of adherence to the basic principles of Wraparound, making interpretation difficult (Bruns et al., 2004). Recently, a measure designed to assess service providers' fidelity (i.e., adherence) to the elements of Wraparound has been developed (Bruns et al., 2004). However, studies have not considered the link between fidelity to the Wraparound process and student/family outcomes. The investigation of the effective elements of Wraparound, and the critical components of collaboration in general, are important areas to consider in order to examine effective ways of meeting the needs of, and promoting resiliency in, children and youth with EBD. Therefore, this study examined the Wraparound process in Saskatchewan. Specifically, this study investigated the following research questions:

1. How does participation in Wraparound services affect child/youth outcomes?
2. To what extent are the essential elements of the Wraparound process adhered to?

3. What is the association between adherence to the essential elements of the Wraparound process and child/youth outcomes (i.e., which elements are related to producing positive child outcomes)?

1.2 Terminology

The following definitions are provided to ensure consistency and understanding of these terms throughout the study.

1.2.1 Emotional and Behavioural Disorder (EBD)

A persistent disorder characterized by emotional or behavioural responses that are incompatible with the individual's social and interpersonal surroundings (Kauffman, 2005).

1.2.2 Wraparound

Wraparound is a multidisciplinary team approach that focuses on the child/family strengths in order to generate an individualized support plan which utilizes services within the community and draws upon natural supports for children and youth (Bruns et al., 2004). Wraparound "promotes utilization of the least restrictive, least intrusive, developmentally appropriate interventions in accordance with the strengths and needs of the student and family within the most normalized environment and an overall system of care" (Peterson, Canfield, & Tvrdik, 2004, p. 26). This model is based on ten essential elements: services must be collaborative in nature, community-based, focused on family strengths, culturally appropriate, team-driven, outcome-based, as well as ensure family voice in decision making, have access to flexible funding, include a balance of formal and informal services, and provide unconditional care (Burns & Goldman, 1998).

1.3 Significance of the Study

The needs of children and youth with EBD are complex and multifaceted, requiring interventions that often span the human services agencies (e.g., mental health, education, juvenile justice, child welfare, etc.). The lack of agency integration and collaboration has led to disjointed service delivery and unsuccessful interventions (e.g., Dieker, 2001; Eber et al., 2002). Given the negative life outcomes consistently exhibited by these children and youth (Conway, 2003; Kauffman, 2005) it is imperative that they receive empirically validated interventions and services to meet their complex needs. When service providers collaborate effectively, they can develop, implement, and sustain successful programming options which result in improved outcomes for students with emotional and behavioural challenges. This study collected relevant research data that allowed for the examination of the critical components of service provision to students with emotional and behavioural disabilities. This resulted in pertinent information for practical applications within the education system that will allow for the creation of effective plans that can meet the various needs of our students.

1.4 Organization of the Study

A review of the related literature in regard to consultation, collaboration and teaming, and descriptions of the Wraparound process follows in Chapter 2. A description of the research methods and procedures employed will be presented in Chapter 3, while an analysis of the data will be presented in Chapter 4. The final chapter, Chapter 5, summarizes the conclusions of the study, implications for practice, and directions for further research.

Chapter 2: Literature Review

All students are entitled to a positive educational experience where: the potential of all can be developed and enhanced; students can develop to their fullest potential; and students can experience multiple successes in a supportive environment in order to become successful members of society (Saskatchewan Education, 1999). In order to understand the research objective within an educational context, the following areas are considered in the review of the literature: the goals of education in Saskatchewan; the mental health of children and youth, with a focus on Emotional and Behavioural Disorders; consultation, collaboration and interactive teaming; and Wraparound services as an illustration of effective collaborative processes.

2.1 Saskatchewan Goals of Education

The focus of education in the province of Saskatchewan is to enable the development of the highest potential of all students (Saskatchewan Education, 1999). Students must be provided with opportunities to maximize the development of their knowledge, skills, and attitudes in order to participate fully in a dynamic world (Saskatchewan Education, 1999). According to Saskatchewan Education (1999) these core goals of education include: competence in basic skills (e.g., reading, writing and basic computation, the ability to acquire and process information, effective problem solving, communication of ideas, etc.); valuing and independently engaging in lifelong learning; understanding and effectively relating to others; developing a positive self-concept; practicing a positive life style; spiritual development; cultivating awareness of career interests and opportunities; becoming an active member of society; and being able to grow with change. There is, however, a great deal of debate over the best way to actualize these goals in students with disabilities (e.g., Ysseldyke, Algozzine, & Thurlow, 2000). Providing services for

children and youth with mental health disabilities has proven to be especially challenging (Conway, 2003; Eggertson, 2005).

2.2 The Mental Health of Children and Youth

The definition of *health*, as defined by the World Health Organization (WHO; 2005), is "…a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (¶ 1). Thus, mental health is a fundamental element of the overall well-being and health of an individual. Students with mental health disabilities present a challenge to providing effective educational services, and consistently exhibit indicators of negative life outcomes (Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004; Conway, 2003; Eber, Sugai, Smith, & Scott, 2002).

It is estimated that 21% of children and youth in Saskatchewan are afflicted with mental disorders and, as a result, live with some form of functional impairment (Conway, 2003). Approximately 5 to 9% of youth between the ages of nine and seventeen have severe functional impairments and are regarded as having a *serious emotional disturbance* (SED) (Conway, 2003). Mental disorders in children and adolescents are divided into two broad categories: (1) disorders of psychological development which result from developmental delay or impairment in specific functions (e.g., speech and language impairment may result in dyslexia, autism is characterized by impairments in the development of social and language skills); and (2) emotional and behavioural disorders (EBD; e.g., Attention Deficit/Hyperactivity Disorder, disruptive disorders) (Conway, 2003). This second broad category, which is the focus of this study, needs to be considered in more detail.

2.2.1 Emotional and Behavioural Disorders (EBD)

Children and youth who have EBD typically experience behaviours that are incompatible with their social and interpersonal surroundings (Kauffman, 2005). The main characteristics of the definition of EBD include:

1. Emotional or behavioural responses in school
2. Difference from age, cultural, or ethnic norms
3. Adverse effect on educational performance (academic, social, vocational, or personal)
4. Responses to stress that are more than temporary or expected
5. Consistent problem in two different settings, including school
6. Persistent disorder despite individualized interventions
7. Possibility of coexistence with other disabilities
8. Full range of disorders of emotions or behaviour. (Kauffman, 2005, p. 21)

Although Saskatchewan Learning does not employ a formal definition of EBD (A. Sloboda, personal communication, April 2, 2007), the criteria used for the definition of *inappropriate behaviour* include any behaviour that is "injurious to self or others; interferes with learning; either one's own or that of others; interferes with skills that have already been learned, by causing a plateau in learning or actual regression; precipitates additional problem behaviours or emotional reactions in self or others; or causes social exclusion" (Saskatchewan Learning, 2007, p. 226). In addition to these criteria, the inappropriate behaviour must be significant with regard to frequency (i.e., occur repeatedly), intensity (i.e., excessively intense in nature), duration (i.e., persists for an unusual length of time), and discrimination (i.e., ability to differentiate in/appropriate contexts for the behaviour) (Saskatchewan Learning, 2007).

Conway (2003) distinguished three sub-categories of EBD: (1) Attention Deficit/Hyperactivity Disorder; (2) disruptive disorders (Oppositional Defiant Disorder, Conduct Disorder); and (3) depression and suicide in youth. The overtly problematic behaviours observed in children and youth with conduct symptomatic of the first two sub-categories, which relate to the purposes of this study, need to be considered. Attention Deficit/Hyperactivity Disorder (ADHD), occurring in 3 to 5% of school-age children, is the most common behavioural disorder diagnosed in childhood (Conway, 2003). ADHD is characterized by inattention and/or hyperactivity and impulsivity (American Psychiatric Association, 2000). These traits result in significant academic, social, and/or occupational impairment (American Psychiatric Association, 2000). Disruptive disorders, such as Oppositional Defiant Disorder (ODD) and conduct disorder, afflict approximately 10% of children and youth (1-6% and 1-4%, respectively) (Conway, 2003). In childhood, antisocial behaviours characterize these disorders and lead to delinquent and criminal behaviours in adolescence (Conway, 2003).

Children and youth with ODD often display problem behaviours such as frequently losing their temper, arguing with adults, actively defying and/or refusing to comply with requests/rules, intentionally annoying people, and blaming others (American Psychiatric Association, 2000). In addition, they are often irritable, angry, resentful, spiteful, and vindictive (American Psychiatric Association, 2000). Conduct disorder is characterized by aggression and cruelty to people and animals, property destruction, dishonesty, theft, and serious rule violation (e.g., significant truancy from school, frequent episodes of running away) (American Psychiatric Association, 2000). Kauffman (2005) offered insight into these disorders, stating:

> Children who have emotional or behavioural disorders are disabled in an especially critical way. They are cut off in one way or another from the fullness of life itself….A

> young boy with an attention deficit may be so hyperactive or impulsive that the simplest of school tasks becomes arduous and cannot be finished without tremendous and exhaustive effort at concentration. Even a youngster with a conduct disorder may be so impelled to follow his or her own instincts as to be constantly drawn into conflicts, arguments, or physical aggression, even with close family members. Children like these have real and tragic disabilities. (p. 23)

Impulses and behaviours such as these cause significant functional impairment in children's lives, and may lead to a proliferation of negative life outcomes. The educational outcomes for students with EBD may be one area that is negatively impacted.

Historically, educational services for children and youth with EBD have not produced positive outcomes (Kauffman, 2005). Compared with typical students and other disability groups, students with EBD have higher dropout rates, lower rates of graduation, poorer scores in math and reading, and are less likely to attend a post-secondary institute (Kauffman, 2005). Consequently, youth with EBD encounter difficulty finding employment and are prone to early involvement in the criminal justice system (U.S. Department of Health and Human Services, 1999). An American study of educational services in the nation found that these poor outcomes could be attributed to a lack of appropriate programs, poor coordination with other service providers, and inadequate support for families (Knitzer, Steinberg, & Fleisch, 1990). However, both biological and environmental factors have been shown to contribute to the debilitating mental health issues and subsequent negative outcomes of youth with EBD (e.g., Conway, 2003; Kauffman, 2005).

2.2.2 Risk and Resiliency

A myriad of biological, psychological, social, and cultural factors lead to the manifestation of a mental disorder (Conway, 2003). "Most mental disorders and problems are understood as caused by the combination of vulnerability (a biological and/or psychological predisposition to develop any particular disorder) and stressful events that overtax an individual's ability to cope" (Conway, 2003, p. 20). Biological factors involved in EBD may include, "…genetics, brain damage or dysfunction, malnutrition or allergies, and temperament" (Kauffman, 2005, p.179). Children may inherit predispositions to particular behaviours, develop antisocial behaviours as a result of brain damage, experience delayed brain growth due to severe malnutrition resulting in behavioural problems, or have an inborn tendency to respond to the environment in a negative way (Kauffman, 2005).

Studies involving participants with EBD have revealed that these children and youth experience numerous environmental risk factors (e.g., Malmgren & Meisel, 2004; Robbins & Collins, 2003). In their study involving children and youth with EBD, Robbins and Collins (2003) reported that over two-thirds of the participants live in poverty, one in five have been physically abused, "[o]ne in two youth have a parent with a history of mental illness and/or substance abuse, while one in three have witnessed family violence or have a parent who has been convicted of a crime" (p. 203). Malmgren and Meisel (2004) informed us that of the youth with EBD in their study, "75% had been neglected, 49% had been physically abused, and 29% had suffered sexual abuse" (p. 185). Clearly not all children and youth who are predisposed to mental disorders and/or face significant adversity will develop EBD. The concept of resilience "refers to a class of phenomena characterized by *good outcomes in spite of serious threats to adaptation or development*" (Masten, 2001, p. 228). Research on the development of resilience

in children and youth has centered on the assets and resources that enable some individuals to prevail over the damaging effects of exposure to negative risk factors (Fergus & Zimmerman, 2005). These promotive, or protective, factors are comprised of individual internal assets (e.g., coping skills, intelligence), and external resources (e.g., parental support, mentoring) (Fergus & Zimmerman, 2005).

For those who are identified as *at risk* of developing EBD, promising interventions and factors that work to foster resilience focus on enhancing individual and external assets as well as reducing risks (e.g., Masten, 2001). However, it is "not up to the individual child alone to determine his or her success in life – the entire community must contribute to positive, resilient outcomes" (Osher, Kendziora, VanDenBerg, & Dennis, 1999, ¶ 12). Luthar, Cicchetti, and Becker (2000) observed that external protective factors reported across studies of resilience "include the importance of close relations with supportive adults, effective schools, and connections with competent, prosocial adults in the wider community" (p. 545). In summary, the ability of supportive adults, school personnel and community members to work together is essential to moderate the effects of biological predispositions, counteract risk factors, and enhance the protective aspects of the lives of children and youth with EBD.

2.3 Collaborative Processes: Consultation, Collaboration and Interactive Teaming

The success of actualizing the goals of education, and creating environments that foster resilience, for students with EBD is dependent upon the ability of the major stakeholders (e.g., general education teachers, special educators, parents, administrators, counsellors, etc.) to communicate effectively, share their expertise, and work together in order to meet their needs (Snell & Brown, 2000). Three major models have been used to successfully integrate service

delivery provided to children with disabilities: consultation; collaboration; and interactive teaming (Coben, Thomas, Sattler, & Morsink, 1997).

Consultation is most commonly defined using the triadic model in which there is an expert providing professional advice (consultant), and a professional attempting to produce change (mediator) in a certain individual (target) (Thomas, Correa & Morsink, 2001). For example, in an educational setting the consultant might be the special education teacher who shares her expertise in the area of behaviour modification with the classroom teacher. The idea of consultation, however, has evolved from the idea of the *expert* prescribing treatment to one that represents a more equal relationship involving communication, trust, and shared responsibilities (Coben et al., 1997).

"The word *collaboration* is derived from the Latin *collabre*, which means to co-labor or to work together" (Welch, 2000, p. 72). To *work together* refers to the "positive interdependence that exists among team members who agree to pool their resources, share their rewards, and operate within a framework of shared values" (Snell & Brown, 2000, p. 118). One individual alone seldom has the knowledge, resources, and time to develop, implement, and evaluate a successful program (Snell & Brown, 2000). An effective, appropriate program to meet the needs of students with disabilities must rely on the collaboration of a team (Friend, 2005).

Teaming is a term used to mean "professional and parental sharing of information and expertise, in which two or more persons work together to meet a common goal" (Thomas et al., 2001, p. 5). In an educational setting, the common goal is to provide the most effective, appropriate program in order to develop the student's knowledge, skills, and attitudes to their fullest potential according to the Saskatchewan goals of education (Saskatchewan Education, 1999). Thomas et al. (2001) further explained that in order to achieve these goals schools must

engage in collaborative consultation through an *interactive team.* An interactive team is one in which "there is mutual or reciprocal effort among and between members of the team to meet this goal" (p. 5). A team may include, but is not limited to teachers, administrators, parents, students, elders, social workers, and educational psychologists (Coben et al., 1997).

Each member of an interactive team may at some point be the *expert* who shares certain knowledge and skills in a reciprocal manner with regard to an issue and, therefore, engages in consultation (Thomas et al., 2001). Each member may also be the recipient of consultation as other team members take the consultative role in areas of their expertise (Thomas et al., 2001). For example, parents are the recipient of consultation as they receive recommendations from the team's behaviour specialist on anger management. They may also take the consultative role with regard to the student's history and home behaviour (Bunch, 1999). To summarize, in order to meet the needs of children and youth with EBD, supportive adults, school personnel, and community members must engage in collaborative processes such as collaborative consultation through an interactive team. In order to actualize the goals of education for students with disabilities, schools must develop a collaborative culture (Saskatchewan Learning, 2005).

2.3.1 Developing a Collaborative Culture in Saskatchewan Schools

Saskatchewan Learning (2005) believes that a "collaborative culture within all Saskatchewan schools improves educational experiences for all students, promotes shared or common goals and helps to resolve conflicts" (p. 1). This culture can only be developed through interactive teaming, "when educators engage in collective reflection, dialogue and shared work with colleagues, parents, students and community partners to address issues central to the school as a learning community" (Saskatchewan Learning, 2005, p. 1). Dieker (2001) stressed the importance of not only engaging in collaborative processes *within* the school but also that

"ongoing collaboration across grades and schools could ensure that students are not the victims of disjointed service delivery" (p. 265). To facilitate the development of a collaborative culture it is important to understand the benefits and key features of collaborative processes, as well as barriers to its success.

2.3.2 Benefits of Collaborative Processes

There are many benefits to interactive teaming. Through effective communication and sharing of expertise, the team members will develop a greater understanding of others' roles, develop increased ownership and commitment to goals, and generate multiple possibilities for problem solving (Welch, 2000). Hobbs and Westling (2002) explained that the benefits of collaborative processes include teachers being "offered the advantages of team support and collaboration for situations which, in the past, they had faced alone" (p. 4). The strengths of interactive teaming include: professional development (i.e., team members learn from the expertise of others in various fields); enhanced collegiality (i.e., collaborative involvement in brainstorming and strategy development leads to a more positive working relationship among team members and decreases the sense of isolation); and superior and more cohesive student programs (i.e., the availability of expertise from multiple sources leads to more effective, comprehensive program development that is better able to meet the needs of students with disabilities) (Thomas et al., 2001). In order for effective interactive teaming to occur, team members must understand the key features of the collaborative process (Welch, 2000).

2.3.3 Key Features of Collaborative Processes

Sharing common goals is the first key feature of collaborative processes (Welch, 2000). The entire process of interactive teaming is driven by the need to achieve shared specific objectives and common goals (Thomas et al., 2001). The overarching goal for students with

disabilities is to provide opportunities to learn in the *least restrictive environment (LRE)*, "environments that are as much like normal, or as least restrictive, as possible" (Ysseldyke et al., 2000, p.83).

The second key feature of collaborative processes are interdependence and equality (Welch, 2000). Members of an interactive team are professionals and parents who "share knowledge and expertise and 'teach' other team members their skills as appropriate. They view each other as equal partners in their efforts to provide students with support and effective programming" (Coben et al., 1997, p. 4). In attempting to meet the common goals, team members make meaningful contributions based on their varying perspectives and areas of knowledge and skill (Welch, 2000).

Reciprocal exchange of resources is the third key feature of collaborative processes (Welch, 2000). In a time of an increasingly diverse student body and under-funding, an interactive sharing of resources (i.e., information, human, financial, physical and technological resources) is essential (Welch, 2000). Welch (2000) clarified that this "involves sharing tangibles, such as materials, personnel, and funding, as well as intangibles, such as risk, control, and ideas, to meet a common goal" (p. 75).

The fourth key feature of collaborative processes is decision making (Welch, 2000). All team members must engage in the decision-making process and arrive at a decision that reflects the group consensus (Thomas et al., 2000). Ysseldyke et al. (2000) viewed joint decision-making as one of the critical elements of developing a true partnership between educators and parents. The decision-making process involves effective problem-solving and communication skills (Welch, 2000).

Problem solving is the fifth key feature of collaborative processes (Welch, 2000). In order to effectively meet the educational goals for students with disabilities it is critical that the team meets on a regular basis to engage in collaborative problem-solving (Voltz, Brazil, & Ford, 2001). For effective collaboration to occur it is important that a specific process for problem-solving is decided upon in advance to ensure that team members are, in fact, working towards achieving their goals (Welch, 2000).

The sixth key feature of collaborative processes is communication (Welch, 2000). Effective communication skills are critical for all members of the team (Coben et al., 1997). Communication is an interactive process of sending and receiving verbal and nonverbal messages (Welch, 2000). The purpose of communication is to ensure that the messages (i.e., ideas, feelings, and information) sent are received, or interpreted, correctly (Welch, 2000). Thomas et al. (2001) described good communication as "*purposeful*, with an intent clear to all parties; *planned*, in terms of thinking through what should be transmitted; *personalized*, according to the receiver's background; *open*, in terms of people's being able to express feelings; and *clear*, in that the words used are part of the other's language" (p. 161). In addition, Thomas et al. (2001) discussed the significance of "open-mindedness, acceptance, and flexibility" (p. 161), as well as "risk taking, helpful criticism, objectivity, active listening, giving the benefit of the doubt, support, and recognizing the interests and achievements of others" (p.161) as important personal characteristics and interpersonal skills. Finally, crucial to effective communication and the success of interactive teaming is "knowing ourselves and developing respect and trust" (Thomas et al., 2001, p. 161), and maintaining "confidentiality and sensitivity to cultural differences" (Thomas et al., 2001, p. 162).

In summary, the key features of collaborative processes are evident when a team is comprised of equal and contributing partners who are able to communicate effectively during problem solving and decision making in order to reach a shared goal. However, there are many obstacles hindering the achievement of this desired outcome.

2.3.4 Barriers to the Collaborative Processes

In addition to understanding the key features which enable interactive teaming to be successful, it is also important to be aware of the barriers to collaboration (Thomas et al., 2001). Barriers that thwart the efforts of the collaborative consultation process also prevent the development and implementation of programs that enable students to actualize their educational goals. The barriers can be grouped into four categories: conceptual, pragmatic, attitudinal, and professional barriers (Welch, 2000).

Conceptual barriers reflect school culture and traditional concepts regarding the roles of the general education teachers and special educators (Welch, 2000). Traditionally, special educators have been trained to provide interventions in a segregated setting and many general education teachers feel that teaching students with disabilities is not part of their role (Welch, 2000). These conceptualizations are, however, changing with the trend toward inclusion of students with special needs in the general education classroom. Pragmatic barriers include lack of time for team meetings (Friend, 2005), as well as "large caseloads of specialists, scheduling problems, policies, competing and increased responsibilities, and bureaucratic structures within the school" (Welch, 2000, p. 82). Ambiguous roles, under-funding, lack of resources, and logistics are additional pragmatic barriers (Thomas et al., 2001).

Attitudinal barriers occur when team members lack a positive attitude towards collaboration, are rigid in following their set routines, believe change should be instantaneous, or

fear taking risks in the *unknown* of the teaming process (Welch, 2000). Those acting in consultative roles may discover that team members are resistant to their recommendations or do not participate in meetings (Thomas et al., 2001). Professional barriers are revealed through friction between professionals with disproportionate training and skills in the process of collaborative problem-solving (Welch, 2000). In addition, professional jargon can present difficulties in communication (Thomas et al., 2001).

These impediments can be overcome through awareness of effective features and barriers to collaboration, a philosophy that values and encourages the process, conflict management, training in effective communication and problem-solving skills, and *practice* (Welch, 2000). Coben et al. (1997) advised that training in collaborative processes is essential for teachers and should be included in the educational training curriculum. Friend (2005) pointed out that "collaboration does not occur because of positive intent; it requires that you learn the skills to make it a reality" (p. 123).

2.3.5 Collaborative Processes: Summary

Utilizing effective collaborative skills and overcoming conceptual, pragmatic, attitudinal, and professional barriers becomes even more challenging when engaging in interagency collaboration. The needs of students with EBD are complex and multifaceted, requiring interventions that often span the human services agencies (e.g., mental health, education, juvenile justice, child welfare, etc.) (Burns & Goldman, 1999). These agencies frequently lack integration and "human service professionals often refer to the services organizations as 'silos' – containing different services that don't mix even when families have needs that cut across the boundaries of each service category" (VanDenBerg, 1999, p. 19-20). In order for students with EBD, and those at risk for developing EBD, to adequately function behaviourally, emotionally,

academically, and socially in school, and in the larger society, educators must find collaborative ways to partner with a variety of agencies, the community, family and student (Scott & Eber, 2003).

There are new, promising practices based on the concepts that underlie the interactive teaming model. Ysseldyke et al. (2000) looked past the traditional roles of education and advised readers that the "magnitude of the challenges confronting school and children is such that they will not be solved by individual organizations or professions operating in isolation. Rather, they will require multidisciplinary and multidimensional approaches" (p. 308). An initiative put forth by the Government of Saskatchewan (2003), entitled School^{PLUS}, addresses these challenges and agrees that "the needs of today's children and youth cannot be met by schools alone" (p. 5). School^{PLUS} identifies the school as the nucleus of its community and the centre for supports and services utilized by the neighbourhood (Government of Saskatchewan, 2003). In this model, the school "is dedicated to excellence in education while working in concert with the PLUS – families, communities and human services agencies – to create a new kind of institution dedicated to the needs of children and youth" (Government of Saskatchewan, 2003, p. 5). Through collaboration, consultation, and interactive teaming all students will "have the supports they need for well-being and learning and life success" (Government of Saskatchewan, 2003, p. 2).

2.4 Wraparound: A Model for Effective Collaborative Processes

One successful collaborative model that has been used to support programs similar to the idea of School^{PLUS} is the Wraparound approach. In the area of mental health, Wraparound has become a primary model of service delivery for children and youth with high levels of need (Faw, 1999). The Wraparound model is a multidisciplinary team approach that focuses on the

child/family strengths in order to generate an individualized support plan which utilizes services within the community and draws upon natural supports for children and youth (Bruns et al., 2004). The basic premise of the approach is to improve children's options and outcomes by building collaborative teams that *wrap* tailored services around the children, their families, and educators (Eber, 2001; Goldman, 1999). Wraparound is a *planning process* (as opposed to a set of services) for developing teams, creating individualized plans, and providing care (Goldman, 1999; Kendziora, Bruns, Osher, Pacchiano, & Mejia, 2001).

Several theories provide the foundation for the Wraparound process. Munger's (1998) theory of *environmental ecology* assumes that when the larger surrounding service system works competently with the microsystem of the family/home environment, children will function more successfully. This is in agreement with the value base of Wraparound that an understanding of the child's unique family, school, and community environment is essential for effective intervention. *Family systems theory* is based on the belief that in order to effectively serve children, we must assist the family (Christian, 2006). The Wraparound approach embraces this theory and requires that the problem-solving process be family driven, with the agency and the family viewed as equal partners. Building upon this family partnership, Wraparound utilizes a *strength-based* approach that promotes the discovery of the child/family's inner capabilities and resources that can be used to improve functioning (Laursen, 2003).

Wraparound "promotes utilization of the least restrictive, least intrusive, developmentally appropriate interventions in accordance with the strengths and needs of the students and family within the most normalized environment and an overall system of care" (Peterson, Canfield, & Tvrdik, 2004, p. 26). In order to ensure outcomes are socially valid, interventions are focused on developing skills that would enable the child to succeed in the least restrictive educational and

community environment (Eber, Nelson, & Miles, 1997). Normalized needs are emphasized; for example in a school setting "…the goal is for the child to function similarly to a child who is 'doing okay' in general education, not necessarily a model student" (Goldman & Faw, 1999, p. 58).

The term *Wraparound* has been in use since the mid-1980s, however, formal consensus regarding its definition and fundamental values has only been recently achieved (Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004). In 1998, key individuals identified through the existing evidence base for Wraparound were asked to participate in a focus group for the purpose of defining, and identifying the essential elements of, the Wraparound approach (Burns & Goldman, 1999). The current definition of Wraparound is based on the group's agreement that the Wraparound model is based on ten essential elements. The first essential element is that services must be community-based (Burns & Goldman, 1999). "The Wraparound process is based on a very powerful belief that children should live and receive services in their home communities, not in institutions" (Kendziora et al., 2001, p. 21). In order to promote successful functioning in their natural environments (i.e., home, school, and community), Wraparound ensures that the family is able to identify and access community resources (Goldman, 1999). In contrast, conventional services are "often clinic based or otherwise *place based*" (Kendziora et al., 2001, p. 22), and the availability of services is dependent upon professional convenience.

Individualized and strength-focused services are the second essential element of the Wraparound model (Burns & Goldman, 1999). The uniqueness of each child and family must be addressed through a careful analysis of their individual strengths and needs across life domains (e.g., educational, behavioural, familial, medical, vocational, legal, etc.) (Eber, Sugai, Smith, & Scott, 2002; Goldman, 1999; Scott & Eber, 2003). Resources and services are accessed or

developed on the basis of these individualized needs (Eber, Nelson, & Miles, 1997). Wraparound support planning is strength-focused, as it is initiated from child and family "personal, interpersonal, and academic strengths rather than from their weaknesses, deficits, and problem behaviours" (Eber et al., 2002, ¶ 16). Conventional services often lack individualization and are limited by the agency's menu of available resources (Kendziora et al., 2001). Rather than focusing on strengths, assessment is deficit oriented with the goal of *fixing* a problem considered inherent in the child and/or family (Kendziora et al., 2001).

The third essential element is that the Wraparound model is culturally competent (Burns & Goldman, 1999). Learning about, and respecting, each family's race, culture, community, and spirituality is an important part of the Wraparound process (Goldman, 1999). Effective service delivery is well-grounded in cultural sensitivity (Eber et al., 1997; Kendziora et al., 2001).

The fourth essential element is that the Wraparound model is family driven (Burns & Goldman, 1999). Families are essential resources for their children and must be engaged as equal partners in the process (Goldman, 1999). Playing an active role in planning their own development leads to authentic ownership of the plan (Amankwah, 2003), as well as empowerment, competence, and self-reliance (Walker & Schutte, 2004). The relationship developed with the family should be characterized by "no blaming, no shaming, dignity, respect, empathy, listening, support, meaningful options, and self-determination" (Goldman, 1999, p. 29). Rather than being based upon child and family input, conventional services are agency driven, with planning and solution generation executed mainly by the professionals involved (Kendziora et al., 2001).

A well supported team is the fifth essential element (Burns & Goldman, 1999). The primary component of successful Wraparound planning is a well-supported team consisting of the child, family, natural supports (e.g., extended family, friends, etc.), community services and various agencies (Goldman, 1999). Each team is unique due to its members being selected on the basis of their knowledge of the strengths and needs of the child and family, and their commitment to helping them succeed (Eber et al., 1997). The teams are based on "partnership, equity, mutual problem-solving, and consensus decision making" (Kendziora et al., 2001, p. 135). Wraparound not only supports the child and family but also those who regularly provide for the child (e.g., teachers) (Eber et al., 1997; Goldman & Faw, 1999). In contrast to the shared authority of Wraparound, the conventional model views the agency as having power over the dependent client (Kendziora et al., 2001).

Flexible funding is the sixth essential element of the Wraparound process (Burns & Goldman, 1999). Teams must have access to sufficient and flexible funding in order to utilize and/or develop individualized supports and services within the community (Goldman, 1999). A review of the research literature has shown Wraparound to be more cost effective than conventional funding expenditures which provide "reimbursement for categorical services" (Kendziora et al., 2001, p. 22).

The seventh essential element of the Wraparound process is a balance of conventional and natural supports (Burns & Goldman, 1999). Based on the unique circumstances of each child and family, a combination of conventional supports (e.g., therapy, social skills instruction, behavioural strategies, medication, etc.) must be balanced with natural supports (e.g., mentors, peer supports, respite, keyboard lessons, etc.) in order to produce effective outcomes (Eber, 2001; Goldman, 1999). Conway's (2003) report on Saskatchewan Mental Health found that,

"[c]onsumers of mental health services have consistently told us that what contributes to their recovery as much as formal services is the care and support from family, friends, and community, and from other consumers. There is no question that such support is critical, essential for most people" (p. 14).

Unconditional commitment is the eighth essential element of the Wraparound process (Burns & Goldman, 1999). Service providers and teams must adhere to an unconditional commitment to support and serve the child and family (Goldman, 1999). Rather than rejecting the child and family from services, services and interventions are changed to meet their needs (Kendziora et al., 2001). Kendziora et al. (2001) found that "youths' perception of their team as unconditionally committed is correlated with decreases in the severity of acting out behaviours, with decreases in depressed and self-injurious behaviours, and with increases in their overall satisfaction with services" (p. 139).

The ninth essential element of the Wraparound process is interagency/community collaborative processes (Burns & Goldman, 1999). The effective creation and implementation of an individualized, strength-based service plan which addresses the complex needs of the child and family is dependent upon interagency, familial, and community collaboration (Goldman, 1999).

Identified and measured outcomes is the tenth, and final, essential element of the Wraparound process (Burns & Goldman, 1999). Quality services and supports are ensured through diligent documentation and monitoring of desired outcomes (e.g., improved academic and behavioural functioning, extracurricular and/or work opportunities, etc.) (Eber et al., 2002; Goldman, 1999; Kendziora et al., 2001). For Wraparound these outcomes are based on goals

determined by the child and family team, whereas conventional services base their outcomes on symptoms (Kendziora et al., 2001).

In order to be considered as truly engaging in the Wraparound approach, service providers must adhere to these 10 essential elements, "…if it isn't happening, it's not Wraparound" (Burns & Goldman, 1999, p. 139). When considering use of the Wraparound approach as a mode of service delivery, one must consider its usefulness in the school environment.

2.4.1 School-Based Wraparound

The education system is an important setting for the identification of mental disorders in children and youth (Conway, 2003). It has been observed that mental health is not a priority in the health care system (Conway, 2003). "Children's mental health services are the 'most neglected piece' of the Canadian health care system, says Senator Michael Kirby, chair of a committee examining Canadian mental health issues….If mental health services generally are the orphan of the health care system, then children's services are the 'orphan of the orphan'" (Eggertson, 2005, p. 471). Schools are a natural point of entry for implementing Wraparound for children and youth with EBD (e.g., Eber, Osuch, & Rolf, 1996). Children spend a significant amount of time in school where they have access to a variety of formalized support services (e.g., nurses, counsellors, special educators, etc.) which have structured routines for service delivery (Eber et al., 2002; Epstein, Nordness, Gallagher, Nelson, Lewis, & Schrepf, 2005).

Originally, the Wraparound process was introduced in the schools to provide support services for students with the most intensive behavioural and emotional needs (Eber et al., 1997). Success led to its utilization as a method of prevention and early intervention for students

identified as *at risk* for developing EBD (Goldman & Faw, 1999). This "includes the 5%-15% of students for whom school-wide interventions have not been effective" (Scott & Eber, 2003, p. 135). Effective school-based planning can utilize Wraparound for students with intensive and/or chronic special needs, regardless of disability (Eber, 2001; Eber et al., 2002).

2.4.2 Wraparound in Action

As of March, 2002, several successful Wraparound initiatives have been implemented with Saskatchewan families (Saskatchewan Health, 2002). Hundreds of people in Saskatchewan have been trained to work with the Wraparound process. In 2002, there was a "provincial Integrative Wraparound coordinator, a provincial Integrative Wraparound Steering Committee, and more than 60 Saskatchewan colleagues trained as Trainers in Integrative Wraparound" (Saskatchewan Health, 2002, p. 5).

In 2003, Amankwah investigated individuals who were trained to use the Wraparound process in 2001. This study sought to determine participants' perceptions of the educational value of the training, as well as their attitudes towards the Wraparound approach and integrated service delivery. Overall, Amankwah (2003) found that participants perceived the training sessions to be "highly successful" (p. 10), and that "…workers from a variety of human service organizations appreciate the effectiveness that results from adoption of people-centred principles that call for collaborative, rather than compartmentalized, approaches…" (p. 10-11).

Research on the Wraparound approach has shown that the utilization of this collaborative practice with children and youth experiencing emotional and behavioural difficulties has produced desirable results (e.g., Burns & Goldman, 1999; Kendziora et al., 2001). Children and youth who have received Wraparound services have shown a decrease in overall *problem behaviours* (Burns et al., 1999; Goldman & Faw, 1999; Peterson, Canfield, & Tvrdik, 2004a;

Robbins & Collins, 2003; Schubauer & Hoyt, 2003), and improved *behaviour adjustment* and *emotional functioning* (Burns et al., 1999; Eber et al., 1996; Hagen, Noble, Schick, & Nolan, 2004; Pacchiano, Eber, & Devine-Johnston, 2003; Peterson et al., 2004a). Goldman and Faw (1999) observed a considerable reduction in overall problem behaviours, such as, "acting out behaviours, inward destructive behaviours (depression, suicidal), delinquency, aggressive behaviour, and anxious/depressed behaviour" (p. 74). Improved behavioural and emotional adjustment were reported by Eber et al. (1996) whose Wraparound participants engaged in more normalized behaviour, were less withdrawn, and demonstrated more positive moods.

The implementation of Wraparound services has shown a reduction in the number of children and youth in *out-of-home placements* (Burns, Goldman, Faw, & Burchard, 1999; Eber, Nelson, & Miles, 1997; Eber, Osuch, & Rolf, 1996; Goldman & Faw, 1999), *psychiatric hospitalizations* (Bertram, Malysiak, Rudo, & Duchnowski, 1999; Eber et al., 1996; Goldman & Faw, 1999) and *cost of services* (Goldman & Faw, 1999; Stevenson, 2003). Goldman and Faw (1999) found that between 1995 and 1998, the number of days children spent in psychiatric hospitals was reduced from 23,000 days per year to 13,000 days; and the number of these children in residential care decreased from 360 to 240. Bertram et al. (1999) reported similar findings in Kansas, where the number of children in state hospitals decreased from 37 to four within a year. By assisting children and youth in their home communities, Wraparound resulted in lower costs for service provision. Goldman and Faw (1999) reported that the "costs of placing children in psychiatric hospital care ($15,000 per month) and residential treatment ($4,800 per month) are higher than the cost of Wraparound services ($3,200 per month)" (p. 50).

Wraparound services have also shown decreases in the use of *restrictive school settings* (Eber et al., 1997; Goldman & Faw, 1999), as well as improvements in *school functioning*

(Burns, Goldman, Faw & Burchard, 1999; Eber et al., 1997; Duckworth et al., 2001; Peterson et al., 2004a; Robbins & Collins, 2003), *academic performance* (Goldman & Faw, 1999; Pacchiano et al., 2003; Peterson, Gruner, Earnest, Rast, & Abi-Karam, 2004b; Robbins & Collins, 2003; Schubauer & Hoyt, 2003), and *social behaviour* (Eber et al., 1996; Goldman & Faw, 1999; Robbins & Collins, 2003; Schubauer & Hoyt, 2003). Goldman and Faw (1999) found that since the La Grange Area Department of Special Education (LADSE), Illinois, implemented a school-based Wraparound program the number of self-contained classrooms for children with EBD (grades K-8) decreased from eight to zero. Eber et al. (1997) also reported findings from LADSE gathered throughout the school year, 1994 to 1995. They found that of 25 students with EBD, 18 successfully maintained their placement in the general education classroom, and three students were placed in less restrictive educational settings (e.g., moved from day placement at the psychiatric hospital to a general education classroom with special education support) (Eber et al., 1997).

Improvements in school functioning are reflected in teacher ratings of significant improvements in overall classroom performance and student behaviour in unsupervised settings (Eber et al., 1997). Duckworth et al. (2001) described the results of a school-based Wraparound project, revealing that children with EBD involved in Wraparound services showed a fifty percent decrease in the number of suspensions and absences, and referrals to the office were reduced by two-thirds. Peterson et al. (2004b) engaged in a study which compared school outcomes for a group of students involved in Wraparound services and a control group receiving the standard model of service delivery. Their results showed that "…the children receiving Wraparound had a 29% decrease in absences and a 26% decrease in disciplinary actions

compared to those in the control group who had a 26% increase in absences and a 18% increase in disciplinary actions" (Peterson et al., 2004b, p. 309).

Strengthening academic performance and social behaviour through Wraparound has also contributed to the improvements in school functioning. Peterson et al. (2004b) found that 43% of participants engaged in Wraparound services showed an overall improved grade point average, compared to 17% of participants receiving standard services. Robbins and Collins (2003) reported improvements in academic outcomes which were the result of the students' increased ability to stay on task and complete assignments. Improvements in social behaviour were also observed by Robbins and Collins (2003), who reported considerable change in the "student's ability to cooperate with others, relate appropriately with peers…[and] participate in activities with peers" (p. 204). Other studies have found increased perceptions of competency and self-confidence with the implementation of Wraparound services (Goldman & Faw, 1999; Schubauer & Hoyt, 2003).

Families who have engaged in the Wraparound process have shown improved *family functioning* (Burns et al., 1999; Eber et al., 1996; Goldman & Faw, 1999; Pacchiano et al., 2003), and a high level of *satisfaction with services* (Eber et al., 1996; Grimes & Subberra, 2003; Pacchiano et al., 2003). Improvements in family adaptability and cohesiveness were reported by Eber et al. (1996). Goldman and Faw (1999) found the following positive effects: "…children being able to stay at home, growth in families' ability to meet their own needs, families 'owning' responsibility for their children's care and treatment, families more satisfied, and the ability of families to learn new skills" (p. 50). Grimes and Subberra (2003) found that 93% of the parents/guardians served by the Wraparound process were satisfied with services. Family

satisfaction has been associated with the perception of participation in the process of decision making and inclusion on the team (Eber et al., 1996).

Research on Wraparound services has also revealed *improved relationships between agencies* (e.g., child welfare, mental health, and justice) (Goldman & Faw, 1999), and greater *community involvement* in services (Goldman & Faw, 1999). Although the research literature has revealed positive results from the use of Wraparound, the prior lack of a formal definition and unclear guidelines for delivery practices has made the evaluation of the effectiveness of these services difficult.

2.4.3 Evaluating Wraparound

As previously mentioned, a consensus has only been recently reached with regard to the definition and essential elements of Wraparound (Goldman, 1999). In addition, service providers are still lacking consistent standards and a definitive manual with which to guide delivery practices (e.g., Bruns et al., 2004a; Walker & Schutte, 2004). This ambiguity has led to varied implementation strategies by service providers, and documentation of research studies has been focused on outcome without consideration of adherence to the basic principles of Wraparound, making interpretation difficult (Bruns et al., 2004a).

In order to evaluate the impact of Wraparound interventions and provide feedback on delivery practice, measures have been developed which are designed to assess service providers' fidelity (i.e., adherence) to the elements of Wraparound. One formal measure is the Wraparound Observation Form (WOF) designed to evaluate the implementation of the elements of Wraparound during planning meetings (Epstein et al., 1998; Epstein et al., 2003). Another measure is the Wraparound Fidelity Index (WFI), which assesses service providers' adherence to

Wraparound's elements during service delivery (Bruns et al., 2004b; Wraparound Evaluation and Research Team [WERT], 2005).

Results of studies using measures of Wraparound fidelity have shown considerable variation in the implementation of Wraparound services. Wraparound teams have been shown to face challenges in their ability to include a balance of conventional and natural supports (Bertram et al., 1999; Bruns et al., 2004a; Epstein et al., 2003; Epstein et al., 2005; Peterson et al., 2004a; Walker & Schutte, 2005), and access community-based supports (Epstein et al., 2005; Walker & Schutte, 2005). Two studies by Epstein and colleagues (Epstein et al., 2003; Epstein et al., 2005) found that teams often lacked the presence of adequate informal supports (e.g., friends, extended family members). Teams have been found to be dominated by professionals (Walker & Schutte, 2005), while important stakeholders such as, "…care-giving fathers, grandparents and step-parents were not engaged on teams" (Bertram et al., 1999, p. 198). In addition, therapists, teachers, and other agency members from the community were often not involved in the planning process (e.g., Epstein et al., 2005).

Other studies on Wraparound services have shown a lack of family voice and choice (Malysiak, 1998), service plans that were not based on strengths (Bruns et al., 2004a; Malysiak, 1998), and insufficient measurement of outcomes (Bruns et al., 2004a; Epstein et al., 2005). Malysiak (1998) found that in four of the seven cases they studied, families were not actively involved in the decision making process, they felt misunderstood and undervalued, and service plans were not built on the strengths of the family. Bruns et al. (2004a) observed that inconsistent outcome assessment posed challenges to effective service planning.

Researchers have also found variability of Wraparound services with regard to interagency/community collaborative process (Bertram et al., 1999; Bruns et al., 2004a) and

access to flexible funding (Bruns et al., 2004a). Bertram et al. (1999) found a lack of collaboration between agencies, communities, and families during the development, review, and revision of service plans. "Service plans developed in the schools focused primarily on the child at school. Service plans developed in the mental health or child welfare focused primarily upon the child in the family" (Bertram et al., 1999, p. 198). In an American study, variability was also reflected in access to flexible funds which would be used to individualize services to meet the unique needs of the family (Bruns et al., 2004a).

The previous ambiguity surrounding the definition and elements of Wraparound, and the lack of recognized service standards and implementation manuals, has led to confusion with regard to understanding and implementing Wraparound (e.g., Rast, Peterson, Earnest & Mears, 2004; Suter, Bruns & Burchard, 2004). "Too often, community leaders will say, 'We do Wraparound,' which may mean only a case management approach to service delivery or a flexible pot of dollars to buy alternative services other than what is available through traditional providers" (Goldman, 1999, p. 27). As a result of this ambiguity and variability, evaluating the effectiveness of Wraparound services has been difficult. Thus, research on Wraparound must include a measurement of fidelity to its essential elements in order to make valid comparisons across sites and evaluate the effectiveness of the practice itself.

2.4.4 Linking Wraparound and Child/Family Outcomes

Although a link between adherence to the principles of Wraparound and team effectiveness (i.e., higher fidelity is related to quality team planning) has been demonstrated (e.g., Fleming & Monda-Amaya, 2001; Walker et al., 2004; Walker & Schutte, 2005), there is a gap in the research literature with regard to the association between fidelity to the Wraparound process and child/family outcomes. "With respect to research on children's mental health

services, a crucial step in demonstrating the effectiveness of an intervention is to ensure that it has been adequately described and implemented" (Epstein et al., 2003, p. 354). Treatment fidelity "is an essential element in outcome research" (Epstein et al., 2005, p. 86). Despite inferences about a hypothesized association, this relationship has not yet been adequately investigated. Two preliminary studies have, however, indicated such a link (Hagen et al., 2004; Bruns, Burchard, Suter, Force & Dakan, 2003).

A self-identified *exploratory* study conducted by Bruns et al. (2003) examined 36 families with emotionally and behaviourally disturbed children involved in Wraparound services at a single site (Bruns et al., 2003). The Wraparound Fidelity Index (WFI; Bruns et al., 2004b) was used to measure adherence to the elements of Wraparound. Fidelity scores were compared statistically with child/family outcome data gathered by the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005), Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004), a measure of placement restriction, and a measure of family satisfaction with services and their child's progress (Bruns et al., 2003). Overall, the findings of the study suggested that there may be an association between Wraparound fidelity and child/family outcomes (Bruns et al., 2003). Of concern, however, is the lack of information provided with regard to the diagnoses of the children studied and length of services provided, both of which would have an impact on outcome data.

Hagen et al. (2004) investigated 25 families engaged in the Wraparound process in two geographic areas of Missouri. The youth involved were diagnosed with a range of disorders indicative of severe emotional disturbance (Hagen et al., 2004). Adherence to Wraparound was measured using the WFI (Bruns et al., 2004b) and was compared with data gathered on the emotional and behavioural functioning of the youth, as measured by the Weekly Adjustment

Indicator Checklist (WAIC; Burchard & Bruns, 1993) (Hagen et al., 2004). Overall, the youth showed significant improvement in emotional and behavioural functioning (Hagen et al., 2004). Improvements in youth/family functioning was strongly associated with the quality and cohesion of the team process (Hagen et al., 2004). Hagen et al. (2004) found that "positive outcomes are associated with the youth and family team's ability to reach consensus on decisions and maintain cohesion during difficult times. Negative outcome is associated with lack of team consensus and cohesion, especially in the face of crisis situations" (Hagen et al., 2004, p. 296). These authors believed that fidelity to the Wraparound process may be an important predictor of youth/family outcomes (Hagen et al., 2004).

Although positive results were observed, Hagen and colleagues (2004) examined only a small sample size. The researchers utilized only one measure of emotional and behavioural functioning, and individualized, strength-based youth/family outcomes were not addressed. Participant selection was based on the families having received Wraparound services for at least 30 days. However, it can be argued that it takes time to build trust, establish an effective team, access resources, create and implement plans, and have outcomes to measure. This time frame of 30 days also conflicts with the items on the WFI. For example, one item asks, "Has the team measured your satisfaction and your child's satisfaction with services in the past 3 months?" (Bruns et al., 2004b, p. 82). One would expect that those engaged in Wraparound services for longer periods of time would encounter more experiences of adherence to the elements and this would be reflected in the fidelity scores.

2.5 Summary

There is a continued need for controlled research on the association between Wraparound implementation and child/family outcomes. Research which incorporates multiple sites and

compares Wraparound with the conventional model of service delivery would provide further clarification on the identification of the elements of Wraparound that are most (and, conversely, least) conducive to producing successful outcomes. Such research has the potential to impact service provision by allowing for the investigation of the effective elements of Wraparound, and collaborative processes in general.

Chapter 3: Methodology

3.1 Overview

The purpose of this study was to examine the Wraparound process in Saskatchewan and investigate the association between adherence to the essential elements of the Wraparound process and student outcomes. The Wraparound Fidelity Index 3.0 (WFI; Suter et al., 2005) was used to gather data on adherence to the elements of Wraparound, as well as information on school/home placement and custody status. In order to gather data on student outcomes, service providers were asked to complete a variety of clinical and functional scales, behavioural and emotional assessments, and teacher rating inventories. Student outcome data were compared with the information gathered on Wraparound (i.e., collaborative services) in order to examine the effective elements of collaboration.

3.2 Participant Recruitment and Selection

3.2.1 Recruitment

Three school divisions in Saskatchewan were recruited for this study. To protect the confidentiality of participants, these school divisions have not been named but instead were assigned the titles of School Division One, School Division Two, and School Division Three. Via a phone call and a follow-up letter (see Appendix A), the researcher contacted the Superintendent of Schools and Learning (School Division One), the Director of Education (School Division Two), and the Superintendent of Student Support Services (School Division Three) and gained approval in principle to conduct research in the school divisions. Following approval by the University of Saskatchewan Behavioural Research Ethics Board, a copy of the certificate of approval was submitted to the school divisions (see Appendix B). The research

proposal was also resubmitted to those previously contacted in each school division for final approval.

The researcher then contacted individual schools within the three school divisions in order to gain permission to conduct research from individual principals. Principals who self-identified as being interested in participating in the research, and who verified that the school included students who met the criteria for the study, were recruited. Upon verification of approval from their respective school divisions, the principals released the names and parental/guardian contact information of qualifying students to the researcher.

The researcher spoke to the student's primary caregiver using a prepared script (see Appendix C) in order to request their participation in the study. The caregivers were approached in a random order and were recruited based on positive interest in the study on a *first come, first serve* basis.

3.2.2 Selection and Exclusionary Criteria

Students who were experiencing impaired functioning in the school, family, and/or community as a result of behavioural difficulties (as identified by the teacher or family) were selected for the study. Requirements for participation stipulated that the students in the Wraparound Group must have been involved in Wraparound services for at least three months, and that the students in the Control Group (i.e., students who were not involved in Wraparound services) must have been receiving formal services (with a focus on their behavioural difficulties) provided by the school for at least three months. Students were excluded from this study if: (1) they had not been receiving services for at least three months; (2) one of their primary goals in their Personal Program Plan (PPP) did not focus on behavioural improvement; and (3) they had not been previously identified as *at-risk* on at least one of the Clinical Scales'

composite scores (indicating problem behaviours) of the Behaviour Assessment System for Children (BASC€; Reynolds & Kamphaus, 1992).

3.3 Process of Gaining Consent

Upon initial contact requesting participation, the purpose of the research was verbally explained to the students' primary caregivers by the researcher and verbal consent to participate was gained. An information letter about the study and a consent form were sent by the school to the parent(s)/guardian(s) (see Appendix D). The information letter and consent form were written at a grade 8.4 readability level in order to enhance parent/guardian understanding of the study. Participants were informed that their participation was voluntary and that they were free to withdraw for any reason, at any time without penalty of any sort.

3.4 Confidentiality

All participants were identified by a coding system (i.e., an identification number) to maximize confidentiality. The data from this study were reported in aggregate form without identification of individual participants. During the interview, the participants were informed that they may take a break if the need arose. It was explained to the participants that involvement in this research was voluntary and they were free to withdraw at any time without penalty. In addition, the school counsellor was made aware of the study and participants were encouraged to contact the school counsellor should they require his/her services.

Participants were provided with information on how the researcher could be contacted if they had questions or concerns in the Letter of Information (see Appendix D) describing the study. Participants were encouraged to contact the researcher for information on the results of this study if they were interested.

3.5 Measures

Four measures were used with the participants in this study: (1) the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992); (2) the Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004); (3) the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005); and (4) the Wraparound Fidelity Index (WFI; Bruns et al., 2005).

3.5.1 Behaviour Assessment System for Children (BASC)

The first instrument utilized in this study, the Behaviour Assessment System for Children (BASC), assesses adaptive and maladaptive behaviours and self-perceptions of children and youth ranging in ages from 4 to 18 years (Reynolds & Kamphaus, 1992). There are five components to the BASC which may be used individually or in various combinations: (1) Self-Report of Personality; (2) Student Observation System; (3) Teacher Rating Scales; (4) Parent Rating Scales; and (5) Structured Developmental History. The test-retest reliability for this instrument was reported to be 0.70, with an inter-rater reliability of 0.67 and internal consistency estimated to be 0.80 to 0.90 (Reynolds & Kamphaus, 1992).

This study utilized the Teacher Rating Scales (TRS) in order to assess adaptive and problem behaviours in the educational setting. The TRS of the BASC is divided into Clinical Scales (representing maladaptive behaviour) and Adaptive Scales (indicative of positive behaviour). A broad composite score, the Behavioural Symptoms Index (BSI), measures the overall degree of problem behaviours.

For classification purposes, Reynolds and Kamphaus (1992) used the following descriptive labels for score ranges on this instrument: (1) Standard Score of 70 and above, *Clinically Significant* (Clinical Scales), *Very High* (Adaptive Scales); (2) 60-69, *At-Risk*

(Clinical Scales), *High* (Adaptive Scales); (3) 41-59, *Average* (Clinical Scales), *Average* (Adaptive Scales); (4) 31-40, *Low* (Clinical Scales), *At-Risk* (Adaptive Scales); (5) 30 and below, *Very Low* (Clinical Scales), *Clinically Significant* (Adaptive Scales).

3.5.2 Behavioural and Emotional Rating Scale (BERS-2)

The second instrument used in this study, The Behavioural and Emotional Rating Scale (BERS-2), is a strength-based assessment that evaluates the behavioural and emotional strengths of children and youth ranging in ages five to 18 years (Epstein, 2004). Test-retest reliability estimates for this instrument ranged from 0.85 to 0.99. While inter-rater reliability estimates ranged from 0.83 to 0.98, and internal consistency estimates ranged from 0.77 to 0.99. There are three components to the BERS-2 which may be used individually or in various combinations: (1) Teacher Rating Scale; (2) Parent Rating Scale; and (3) Youth Rating Scale (Epstein, 2004). This study utilized the Teacher Rating Scale (TRS) in order to assess behavioural and emotional strengths in the educational setting. The TRS is composed of five core subscales: Interpersonal Strength; Family Involvement; Intrapersonal Strength; School Functioning; and Affective Strength. A composite score, the BERS-2 Strength Index, is determined by combining the scaled scores of the five core subscales. Given that the BERS-2 is a strength-based assessment, higher scores indicate greater levels of behavioural and/or emotional strength.

3.5.3 Child and Adolescent Functional Assessment Scale (CAFAS)

The Child and Adolescent Functional Assessment Scale (CAFAS), the third instrument used in this study, assesses the degree of functional impairment in the school, home, and community of school-age children and youth (Kindergarten through grade twelve) (Hodges, 2005). The measure is composed of eight core subscales: School/Work Role Performance; Home Role Performance; Community Role Performance; Behaviour Toward Others;

Mood/Emotions; Self-Harmful Behaviour; Substance Use; and Thinking. These scales are intended to be completed by a staff member who is well informed about the child (Hodges, 2005).

The test-retest reliability estimate for this instrument was 0.78. The inter-rater reliability was estimated to be 0.92, while internal consistency estimates ranged from 0.73 to 0.78 (Hodges, 2005). The subscales of this instrument are assessed by four levels of impairment with a single assigned score: severe (30); moderate (20); mild (10) and minimal/no impairment (0). Hodges (2005) described a score of 30 as indicating severe disruption or incapacitation; a score of 20 implies a major or persistent disruption; 10 suggests significant problems or distress; and 0 signifies no disruption of functioning. A composite, or Total score, indicates an overall level of dysfunction. Higher scores on the CAFAS are indicative of greater levels of impairments. According to Hodges (2005):

> On the CAFAS, a standard for normative behaviour is defined by the "no or minimal impairment" behaviours. A total score of 0 on the CAFAS indicates that no impairment has been observed on any of the eight subscales. Both the CAFAS total score and the scores on individual subscales indicate deviation from this defined standard. The youth's behaviour is noted as either consistent with the defined standard or, to some degree, different from that standard. (p. 34)

3.5.4 Wraparound Fidelity Index (WFI)

The fourth instrument used in this study, the Wraparound Fidelity Index 3.0 (WFI; Suter et al., 2005), was used to assess the service providers' adherence to the essential elements of the Wraparound process. Ten elements were originally conceptualized in the formal definition of Wraparound; however the WFI distinguishes between individualized and strengths-based

services. Therefore, it assesses the following 11 elements: Parent Voice and Choice; Youth and Family Team; Community-Based Services and Supports; Cultural Competence; Individualized Services; Strength-Based Services; Natural Supports; Continuation of Care; Collaboration; Flexible Resources and Funding; and Outcome-Based Services. Test-retest reliability estimates ranged from 0.73 to 0.86, while inter-respondent agreement was estimated to be 0.58 and internal consistency estimates ranged from 0.78 to 0.90. The WFI is an interview which utilizes the information from one, or a combination, of three types of respondents: caregivers; youth (older than 11 years of age); and/or resource facilitators. This study used the information provided from the child's primary caregiver (Suter et al., 2005). Based on the normative sample, Total Fidelity scores for Caregivers have a mean of 74% and a standard deviation of 4%. By summarizing norm- and criterion-referencing data, fidelity benchmarks were proposed by Suter et al. (2005). Less than 67% fidelity likely describes services that do not adhere to the principles of Wraparound. These scores are typical of services *as usual* or during the commencement of Wraparound programs. Overall scores between 67% to 73% indicate low levels of fidelity to the elements of Wraparound. These scores are characteristic of Wraparound programs that are still establishing themselves or that are lacking good supports. Scores ranging from 74% to 80% indicate adequate or acceptable fidelity to the elements of Wraparound and are typical of established Wraparound services. Over 80% adherence to Wraparound principles indicates above-average fidelity. These scores are attributed to the increased presence of supports. A minimum standard (i.e., borderline) for overall adherence to the elements of Wraparound has been set at 65%, adequate fidelity at 75%, and 80% for high fidelity (Suter et al., 2005). An informal benchmark of 80% has been established for high fidelity on individual elements (Suter et al., 2005).

3.6 Data Collection

Once consent had been given by the students' primary caregivers, the caregiver was asked to participate in a short telephone interview with the researcher in order to complete the Wraparound Fidelity Index (Bruns et al., 2005). The student outcome measures (i.e., the BASC, CAFAS, and BERS-2) were distributed by way of mail to the students' teachers (via the Principal) with instructions on how to complete each scale (see Appendix E). These individuals were encouraged to contact the researcher if they had questions regarding the instructions or the measures themselves. The completed measures were returned to the researcher by means of a self-addressed, stamped envelope.

3.7 Data Analysis

In order to investigate the association between adherence to the essential elements of the Wraparound process and student outcomes, student outcome data were compared with the information gathered on the services received by the students. The results from the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005), Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004), and the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) were analyzed using the Statistical Package for the Social Scientist version 14.0 (SPSS), a statistical data analysis software program. For each of these scales, the mean scores and standard deviations of the subscale scores (see Appendix F for assessment scales and subscales), as well as the total composite score, were compared in order to determine significant differences between the Wraparound Group and the Control Group.

Non-parametric inferential statistical methods were employed for this study. Although non-parametric tests have less power than parametric tests they are more robust when the assumptions underlying the appropriate parametric tests are questionable (Huck, 2004). As a

result of the small sample size, the researcher could not assume that the differences between the two research groups were normally distributed. Thus, the Mann-Whitney *U* test was utilized for this analysis due to the fact that it is one of the most powerful nonparametric tests for comparing two independent samples (Huck, 2004).

Data gained from the Wraparound Fidelity Index 3.0 (WFI; Bruns et al., 2005) was also statistically analyzed. Fidelity scores for each of the elements of Wraparound as well as Total Fidelity scores for each research group were compared in order to determine significant differences between the Wraparound Group and the Control Group. Pearson's Product-Moment Correlation tests were used to determine the degree of relationship between student outcome data and fidelity to Wraparound.

Chapter 4: Results

4.1 Overview

The purpose of this study was to investigate the association between adherence to the essential elements of Wraparound service delivery and measures of student outcomes. Two groups of students ranging from Kindergarten to grade six participated in the study: the Wraparound Group, which consisted of 12 students in one school division in Saskatchewan; and 11 students in the Control Group (i.e., those receiving conventional services) situated in two other school divisions in Saskatchewan.

Fidelity to the elements of Wraparound was measured using the Wraparound Fidelity Index 3.0 (WFI; Suter et al., 2005). Data on student outcomes (i.e., behaviours and functioning) were gathered using the Behaviour Assessment System for Children (BASC; Reynolds & Kamphus, 1992), the Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004), and the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005).

4.2 Participants

Three students (and their caregivers) from School Division One, eight from School Division Two, and 12 from School Division Three, for a total of 23 participants, were included in the study. The 12 students who were recruited from School Division Three were engaged in Wraparound services (as identified by the division's Student and Family Support Worker) at the time that the study was conducted. The 11 students from School Divisions One and Two were receiving conventional services (i.e., not classified as *Wraparound*, and organized by the Special Education personnel at the school rather than an outside individual trained in the Wraparound process). The number of months that students had been receiving services in the Wraparound Group ranged from 3 months to 36 months (M=19.92 months, SD=11.57). Students in the

Control Group had been receiving services ranging from 8 months to 48 months (M=19.45 months, SD=11.86). The students in the Wraparound Group were all in the legal custody of either one or both biological parents. One or both biological parents had legal custody of 9 of the 11 students in the Control Group, however, one student was in foster care and one lived with a grandparent. All participants lived in their home communities and attended the local school.

Overall, the participants ranged in age from 6 to 12 years (M=8.78 years, SD=1.91). The Wraparound Group had a mean age of 9.00 years (SD = 2.45), ranged from Kindergarten to Grade 6, and consisted of four males and eight females. The Control Group had a mean age of 8.55 years (SD = 2.82), ranged from Grade 2 to 5, and consisted of 11 males. Participants were experiencing impaired functioning in the school, family, and/or community as a result of behavioural difficulties as identified by the teacher or family.

The students' Personal Program Plan (PPP) targeted at least one behaviour that was having a negative effect on educational performance (academic, vocational, or social). In addition, all students had previously been classified as *at-risk* on at least one of the Clinical Scales' composite scores (indicating problem behaviours) of the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992).

4.3 Research Question Results

4.3.1 Research Question 1

The first question posed was: How did participation in Wraparound services affect child/youth outcomes? The means and standard deviations on the BASC, BERS-2, and CAFAS for the Wraparound Group and the Control Group were examined.

4.3.1.1 BASC Results. The Externalizing Problems composite on the BASC is characterized by problematic and disruptive behaviour. The mean composite and scale scores for the Wraparound Group all fell within the *At-Risk* classification. This differed from the Control Group who received the *At-Risk* classification for the Hyperactivity scale and fell within the *Clinically Significant* range for the Aggression and Conduct Problems scales as well as the composite score. The Mann-Whitney *U* test was used to examine the differences between the mean scale and composite scores of the Wraparound Group and the Control Group (see Table 1). The mean of the Conduct Problems scale for the Control Group (M=83.36, SD=15.12) was significantly greater than the mean for the Wraparound Group (M=66.42, SD=24.25) (Mann-Whitney U=32.50, p=.04). In addition, the mean composite score for Externalizing Problems was significantly greater for the Control Group (M=76.82, SD=9.12) than the Wraparound Group (M=66.42, SD=18.16) (Mann-Whitney U=34.50, p=.05).

The Internalizing Problems composite includes measures of internal difficulties such as anxiety and depression. The mean scores for the Wraparound Group indicated that, on average, the participants in this group were *At-Risk* for Anxiety, Depression, and Internalizing Problems overall. Somatization scores were in the *Average* range. Similarly, the Control Group, on average, scored as *At-Risk* for Depression. However, this group fell within the *Average* range for Anxiety, Somatization, and the Internalizing Problems composite. These differences were significant for the Anxiety scale with the mean score for the Wraparound Group (M=64.42, SD=11.31) being significantly higher than that of the Control Group (M=54.73, SD=11.53) (Mann-Whitney U=33.50, p=.04). On the Somatization scale, the Wraparound Group

Table 1

Means, Standard Deviations, and Statistical Significance on the BASC

BASC Domain	Wraparound		Control		Statistical Significance
	M	SD	M	SD	*p*
Hyperactivity	60.50	12.12	66.09	8.73	.21
Aggression	68.00	14.81	74.36	7.97	.18
Conduct Problems	66.42	24.25	83.36	15.12	.04*
EXTERNALIZING PROBLEMS COMPOSITE	66.42	18.16	76.82	9.12	.05*
Anxiety	64.42	11.31	54.73	11.53	.04*
Depression	65.83	17.98	64.64	15.24	1.00
Somatization	59.50	19.20	49.00	10.80	.05*
INTERNALIZING PROBLEMS COMPOSITE	65.92	16.19	57.36	14.01	.16
Attention Problems	56.83	11.22	64.64	8.76	.10
Learning Problems	52.58	10.85	66.00	11.05	.01**
SCHOOL PROBLEMS COMPOSITE	55.00	11.25	66.00	9.76	.02*
Atypicality	57.42	13.01	56.09	10.06	.88
Withdrawal	59.75	17.68	55.64	9.39	.83
BEHAVIOURAL SYMPTOMS INDEX	65.25	14.80	66.82	9.26	.48
Adaptability	38.50	12.38	33.18	6.31	.27
Social Skills	46.08	9.98	36.00	6.56	.01**
Leadership	52.33	8.46	37.36	4.27	.001**
Study Skills	42.17	7.74	33.36	4.01	.01**
ADAPTIVE SKILLS COMPOSITE	44.17	9.55	34.45	8.32	.03*

Note. *$p < .05$. **$p < .01$.

(M=59.50, SD=19.20) again scored significantly higher, on average, than the Control Group (M=49.00, SD=10.80) (Mann-Whitney U=35.50, p=.05).

The School Problems composite reflects difficulties in attention, motivation, and learning that are likely to have an effect on academic achievement. The mean composite and scale scores for the Wraparound Group all fell within the *Average* classification. This differed from the Control Group who received the classification of *At-Risk* for the Attention Problems and Learning Problems scales as well as the composite score. These differences were significant for the Learning Problems scale with the mean score for the Control Group (M=66.00, SD=11.05) being significantly higher than that of the Wraparound Group (M=52.58, SD=10.85) (Mann-Whitney U=24.00, p=.01). On the School Problems composite, the Control Group (M=66.00, SD=9.76) scored significantly higher, on average, than the Wraparound Group (M=55.00, SD=11.25) (Mann-Whitney U=28.50, p=.02).

Reynolds and Kamphaus (1992) designed the BASC to measure *other* characteristics such as the "tendency to behave in ways that are immature, considered 'odd,' or commonly associated with psychosis (such as experiencing visual or auditory hallucinations)" (p. 48), and the "tendency to evade others to avoid social contact" (p. 48). These problems were measured by the Atypicality and Withdrawal scales, respectively. Both research groups attained mean scores on these scales that fell within the *Average* range and did not differ significantly from one another.

The Behavioural Symptoms Index (BSI) indicates the overall level of problem behaviours by combining the scores from the Aggression, Hyperactivity, Anxiety, Depression, Attention Problems, and Atypicality scales. Both BSI means for the two research groups fell

within the *At-Risk* range. The mean for the Wraparound Group (M=65.25, SD=14.80) did not differ significantly from that of the Control Group (M=66.82, SD=9.26).

The Adaptive Skills composite "summarizes prosocial, organizational, study, and other adaptive skills" (Reynolds & Kamphaus, 1992, p. 52). Aside from the *At-Risk* classification for the mean of the Adaptability scale, all remaining scales and the composite score for Adaptive Skills for the Wraparound Group fell, on average, within the *Average* range. In contrast, all scales including the composite score for the Control Group were classified, on average, as *At-Risk*. In contrast to the Clinical Scales discussed above, higher scores on the Adaptive Scales represent more positive or desirable characteristics. The mean of the Social Skills scale for the Wraparound Group (M=46.08, SD=9.98) was significantly greater than the mean for the Control Group (M=36.00, SD=6.56) (Mann-Whitney U=25.00, p=.01). These differences were also significant for the Leadership scale with the mean score for the Wraparound Group (M=52.33, SD=8.46) being significantly higher than that of the Control Group (M=37.36, SD=4.27) (Mann-Whitney U=10.00, p=.001). On the Study Skills scale, the Wraparound Group (M=42.17, SD=7.74) scored significantly greater, on average, than the Control Group (M=33.36, SD=4.01) (Mann-Whitney U=23.50, p=.01). In addition, the mean composite score for Adaptive Skills was significantly greater for the Wraparound Group (M=44.17, SD=9.55) than the Control Group (M=34.45, SD=8.32) (Mann-Whitney U=30.00, p=.03).

4.3.1.2 BERS-2 Results. Analysis of the BERS-2 revealed that the mean scale scores for the Wraparound Group on the subscales Interpersonal Strength, Family Involvement, Intrapersonal Strength and School Functioning all fell within the *Average* classification. Mean scores for the subscale Affective Strength and the BERS-2 Strength Index were classified as *Above Average*. In contrast, the mean scores for the Control Group were classified as *Below*

Average for the subscales Family Involvement, School Functioning, and Affective Strength; and *Poor* for the subscales Interpersonal Strength, Intrapersonal Strength, and for the BERS-2 Strength Index. The differences between the two Groups were found to be statistically significant on all subscales and composite scores, with the Wraparound Group attaining means significantly greater than the Control Group (see Table 2).

Table 2

Means, Standard Deviations, and Statistical Significance on the BERS-2

BERS-2 Domain	Wraparound		Control		Mann-Whitney	Statistical Significance
	M	SD	M	SD	*U*	*p*
Interpersonal Strength	10.58	4.17	5.09	2.07	23.00	.01**
Family Involvement	12.25	3.08	6.55	2.54	10.00	.001**
Intrapersonal Strength	12.17	5.17	5.82	2.56	27.00	.02*
School Functioning	10.42	4.56	6.27	2.00	26.50	.02*
Affective Strength	13.00	3.10	7.55	2.84	16.50	.002**
BERS-2 Strength Index	111.00	25.88	74.27	13.54	18.00	.003**

Note. *$p < .05$. **$p < .01$.

4.3.1.3 CAFAS Results. The mean scores, standard deviations, and significance levels of the comparison of differences on the CAFAS for the two research groups are presented in Table 3. The subscale scores for Substance Abuse could not be analyzed due to the raters' inability to confirm the use of substances by the participants.

The mean scores for the Wraparound Group indicated that, on average, the participants in this group experienced *Minimal or No Impairment*" in Community Role Performance, Self-Harmful Behaviour, and Thinking. The mean scores for this Group were classified as indicating *Mild Impairment* for the remaining subscales. Similarly, the means for the Control Group fell within the level *Minimal or No Impairment* for Community Role Performance, Self-Harmful Behaviour, and Thinking. However, the mean for this Group also indicated minimal impairment for the subscale Moods/Emotions. The Control Group also differed in that the mean scores for School/Work Performance and Behaviour Toward Others were classified as showing *Moderate Impairment*.

The difference between the research groups was statistically significant on the School/Work Performance subscale, with the mean for the Control Group (M=26.36, SD=5.05) being significantly greater than the mean for the Wraparound Group (M=16.67, SD=10.73) (Mann-Whitney U=30.50, p=.02). Although both groups were classified as showing *Minimal or No Impairment* on the Community Role Performance subscale the difference was statistically significant, with the Control Group showing more impairment (M=6.36, SD=5.05) than the Wraparound Group (M=1.67, SD=3.89) (Mann-Whitney U=35.00, p=.02). When scoring the CAFAS the raters were required to choose a score of 0, 10, 20, or 30 for each subscale. Due to this selection of only one widely varying score per subscale for each individual, the mean variance was quite large as indicated by the standard deviations for both research groups.

Table 3

Means, Standard Deviations, and Statistical Significance on the CAFAS

CAFAS Domain	Wraparound		Control		Statistical Significance
	M	SD	M	SD	*p*
School/Work Performance	16.67	10.73	26.36	5.05	.02*
Home Role Performance	11.67	5.77	16.36	5.05	.06
Community Role Performance	1.67	3.89	6.36	5.05	.02*
Behaviour Toward Others	17.50	7.54	23.64	6.74	.06
Moods/Emotions	12.50	10.55	9.09	12.21	.33
Self-Harmful Behaviour	6.67	9.85	2.73	6.47	.34
Substance Use	0.00	0.00	0.00	0.00	1.00
Thinking	1.67	3.89	6.36	8.09	.11
Total Scale Score	67.50	42.02	90.91	30.48	.10

Note. *$p < .05$.

4.3.2 Research Question 2

The second research question posed was: To what extent were the essential elements of the Wraparound process adhered to?

Fidelity scores for each of the elements of Wraparound and Total Fidelity scores for the Wraparound Group and the Control Group are presented in Table 4. The Mann-Whitney *U* test was applied in order to determine significant differences between the two groups.

Table 4

Percent Fidelity to the Elements of Wraparound

WFI Element	Wraparound		Control		Statistical Significance
	M	SD	M	SD	*p*
Parent Voice and Choice	91.3	0.07	67.1	0.12	.02*
Youth and Family Team	97.9	0.04	60.5	0.29	.09
Community-Based Services and Supports	70.8	0.38	74.6	0.28	1.00
Cultural Competence	88.9	0.10	35.2	0.13	.05*
Individual Services and Supports	69.7	0.37	39.2	0.31	.25
Strengths-Based Services and Supports	87.5	0.11	51.6	0.22	.04*
Natural Supports	66.7	0.26	12.7	0.16	.02*
Continuation of Services and Supports	100.0	0.00	62.8	0.38	.05*
Collaboration	81.3	0.23	54.1	0.19	.14
Flexible Resources and Funding	70.8	0.31	62.5	0.27	.83
Outcome-Based Services and Supports	94.8	0.08	55.5	0.13	.02*
Total Fidelity to Elements	78.2	0.06	46.6	0.17	.00**

Note. *$p < .05$. **$p < .01$.

The mean Total Fidelity score for the Wraparound Group (M=78.2, SD=0.06) attained the level of adequate or acceptable adherence to the Wraparound process. Seven of the individual elements were at least 80% of the total score, a benchmark for high fidelity on individual elements. These elements were: Parent Voice and Choice; Youth and Family Team;

Cultural Competence; Strengths-Based Services and Supports; Continuation of Services and Supports; Collaboration; and Outcome-Based Services and Supports. The remaining four elements fell below 80%: Community-Based Services and Supports (70.8%); Individualized Services and Supports (69.7%); Natural Supports (66.7%); and Flexible Resources and Funding (70.8%).

The mean Total Fidelity score for the Control Group (M=46.6, SD=0.17) did not reach the minimum standard of adherence to the elements of Wraparound. The only element for this group that demonstrated adequate adherence to the Wraparound process was Community-Based Services and Supports (74.6%).

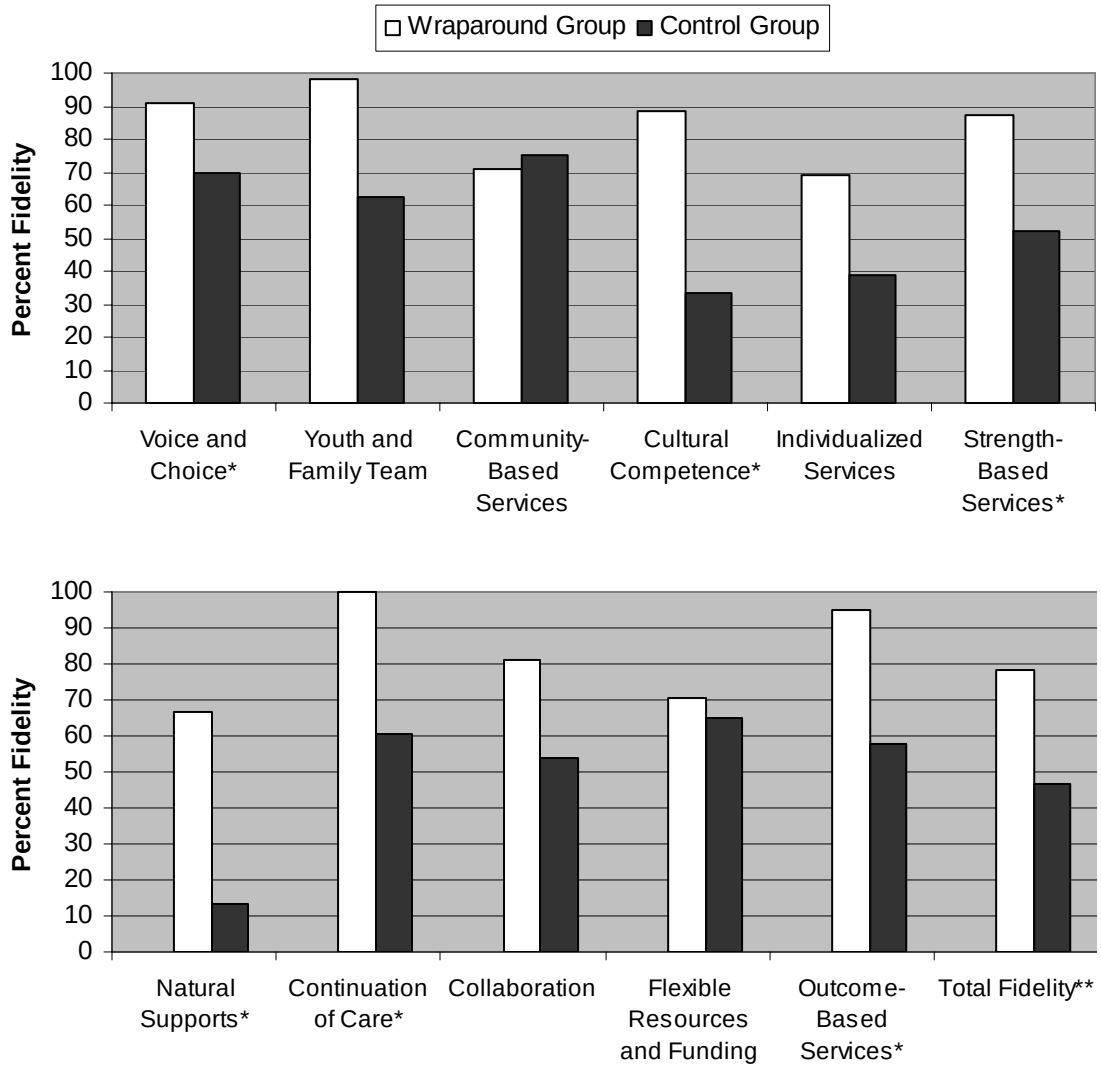
A comparison of the two groups revealed that the Wraparound Group showed more fidelity to the Wraparound process than the Control Group (with the exception of Community-Based Services and Supports). This difference was significant for six of the eleven elements, as well as for the measure of Total Fidelity (see Figure 1).

4.3.3 Research Question 3

The third research question posed was: What was the association between adherence to the essential elements of the Wraparound process and child/youth outcomes (i.e., which elements were related to producing positive child outcomes)?

Tables 5 and 6 display the Pearson *r* correlations between fidelity to the elements of Wraparound and the Behavioural Symptoms Index (BSI) on the BASC, the BERS-2 Strength Index, and the CAFAS Total for the Wraparound Group and the Control Group, respectively. These composite scores were selected for the analyses, as they are recognized by the authors of each scale as providing an overall rating of the intended variable being measured. Statistically significant relationships in the hypothesized direction were found for the Wraparound group

Figure 1. Percent fidelity to the elements of Wraparound



Note. *$p < .05$. **$p < .01$.

between fidelity to Youth and Family Team and the BSI (r = -.99, p = .01), BERS-2 Strength Index (r = .98, p = .02), and the CAFAS Total (r = -1.00, p = .01). Although not statistically significant, strong correlations in the hypothesized direction were found between fidelity to Collaboration and the three outcome measures: BSI (r = -.88, p = .12), BERS-2 Strength Index (r = .89, p = .11), CAFAS Total (r = -.85, p = .15); and between Outcome-Based Services and

Table 5

Correlation between Elements of Wraparound and Outcome Measures for Wraparound Group

Wraparound Group

WFI Element	BASC BSI		BERS-2 Strength Index		CAFAS Total	
	r	*p*	*r*	*p*	*r*	*p*
Parent Voice and Choice	.71	.29	-.68	.32	.73	.27
Youth and Family Team	-.99	.01*	.98	.02*	-1.00	.01**
Community-Based Services and Supports	.61	.39	-.65	.36	.58	.42
Cultural Competence	-.48	.68	.51	.66	-.50	.67
Individual Services and Supports	.33	.67	-.31	.69	.38	.62
Strengths-Based Services and Supports	.78	.22	-.75	.25	.77	.23
Natural Supports	.78	.22	-.76	.24	.80	.20
Continuation of Services and Supports	.a	.a	.a	.a	.a	.a
Collaboration	-.88	.12	.89	.11	-.85	.15
Flexible Resources and Funding	.28	.82	-.29	.82	.21	.86
Outcome-Based Services and Supports	-.94	.06	.93	.07	-.95	.49
Total Fidelity to Elements	.17	.59	-.22	.49	.14	.66

Note. *$p < .05$. **$p < .01$; a. Cannot be computed.

Table 6

Correlation between Elements of Wraparound and Outcome Measures for Control Group

Control Group

WFI Element	BASC BSI		BERS-2 Strength Index		CAFAS Total	
	r	*p*	*r*	*p*	*r*	*p*
Parent Voice and Choice	.38	.62	-.21	.79	.04	.96
Youth and Family Team	.53	.47	-.69	.31	.30	.70
Community-Based Services and Supports	-.59	.41	.99	.01**	-.66	.34
Cultural Competence	.70	.50	-.83	.38	.42	.72
Individual Services and Supports	.99	.01**	-.57	.43	.94	.06
Strengths-Based Services and Supports	.23	.77	.21	.79	.46	.54
Natural Supports	-.05	.95	.11	.89	.28	.72
Continuation of Services and Supports	-.90	.10	.28	.72	-.77	.23
Collaboration	.71	.29	-.68	.32	.91	.10
Flexible Resources and Funding	-.88	.32	.93	.23	-.92	.26
Outcome-Based Services and Supports	.07	.93	-.76	.24	.25	.75
Total Fidelity to Elements	.60	.05*	-.58	.06	.64	.03*

Note. *$p < .05$. **$p < .01$.

Supports: BSI (r = -.94, p = .06), BERS-2 Strength Index (r = .93, p = .07), CAFAS Total (r = -.95, p = .49). Correlations in the hypothesized direction between fidelity to Cultural Competence and the three scores were: BSI (r = -.48, p = .68); BERS-2 Strength Index (r = .51, p = .66); and CAFAS Total (r = -.50, p = .67).

A statistically significant relationship in the hypothesized direction was found in the Control Group between fidelity to Community-Based Services and Supports and the BERS-2 Strength Index (r = .99, p = .01). In addition, the correlation of this element to the BSI and the CAFAS Total was not statistically significant.

Although the direction of the relationship was unexpected, significant results were observed between fidelity to Individual Services and Supports and the BSI (r = .99, p = .01). In addition Total Fidelity was significantly related to the BSI (r = .60, p = .05) and the CAFAS Total (r = .64, p = .03). Although not statistically significant, strong correlations in the hypothesized direction were found between fidelity to Flexible Resources and the three outcome measures: BSI (r = -.88, p = .32); BERS-2 Strength Index (r = .93, p = .23); and CAFAS Total (r = -.92, p = .26). Correlations between Continuation of Services and Supports on the BSI (r = -.90, p = .10) and CAFAS Total (r = -.77, p = .23) were also not statistically significant.

Other strong correlations were found with certain elements; however, the direction of these relationships was unexpected. For example, for the Wraparound Group the element of Strengths-Based Services and Supports was positively correlated with the BSI (r = .78, p = .22) and CAFAS Total scores (r = .77, p = .23), and negatively correlated with the BERS-2 Strength Index (r = -.75, p = .25). This would indicate that greater fidelity to this element is related to higher impairment on the BASC and CAFAS, and less behavioural and emotional strength as measured by the BERS-2. This is the direct opposite of the study's hypothesis that higher

fidelity to the elements of Wraparound would result in less impairment and greater behavioural and emotional strengths.

Chapter 5: Discussion

5.1 Summary

Considerable controversy exists with regard to effectively meeting the needs of children and youth with EBD (Bruns et al., 2004). Collaborative processes have been emerging in the research literature as a critical characteristic of exemplary schools that have been effectively meeting the needs of students with disabilities (e.g., Friend, 2005; McLaughlin, 2002). This research focused on a collaborative model called the Wraparound approach which has shown promising results in supporting children and youth with high levels of need (e.g., Faw, 1999). The purpose of this study was to examine the association between adherence to the essential elements of the Wraparound process and measures of maladaptive behaviours, behavioural strengths, and functional impairment.

The current study examined 23 children in Saskatchewan who were experiencing impaired functioning in the school, family, and/or community as a result of behavioural difficulties. Twelve of the children were engaged in Wraparound services and 11 were receiving conventional services. Adherence to the elements of Wraparound was measured using the Wraparound Fidelity Index (Bruns et al., 2005), a structured interview with the children's caregivers. Maladaptive behaviours, behavioural strengths, and functional impairment were assessed via the children's teachers completing the Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992), the Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004), and the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005), respectively. Differences between the two groups on all measures were analyzed. Additionally, correlational analyses were conducted to investigate the strength and direction of the relationship between fidelity to the elements of Wraparound and the child outcome measures.

5.2 Research Findings

1. Children engaged in Wraparound services demonstrated more positive child and family outcomes than did the children receiving the conventional model of service delivery.
2. Wraparound services showed greater adherence to the essential elements of the Wraparound process than did conventional services.
3. Adherence to the elements of the Wraparound process did not have a clearly defined relationship with child/youth outcomes.

5.2.1 Wraparound Services and Child/Youth Outcome

The first research question attempted to determine how participation in Wraparound services affected child outcomes on several measures of behaviour and emotion. It was hypothesized that children and youth engaged in Wraparound services would show more adaptive behavioural, emotional, social, and academic functioning, and less restrictive home/school/community placement, than those receiving a conventional model of service delivery. Overall, as measured by the BASC, BERS-2, and CAFAS, this hypothesis was supported. Children who were engaged in Wraparound services showed more favourable results than did the children receiving the conventional model of service delivery.

Results of the examination of group differences on the BASC indicated that when compared to children receiving conventional services, those students who were engaged in Wraparound services scored significantly lower on the measures of the following maladaptive behaviours: Conduct Problems; Externalizing Problems Composite; Learning Problems; and School Problems Composite. This group also scored significantly more favourably on the adaptive behaviours of Social Skills, Leadership, Study Skills, as well as the Adaptive Skills Composite. The children involved in Wraparound did, however, score significantly higher on

Anxiety and Somatization than those receiving conventional services. There was not a significance difference between the two groups of children on the remaining scales and composite scores. Significantly less functional impairment, as measured by the CAFAS, was also seen in the children engaged in Wraparound services in the areas of School/Work Performance and Community Role Performance. The two groups did not show a significant difference on the remaining scales of the CAFAS or on the Total CAFAS score.

Examination of the scores on the behavioural and emotional strengths of the children, as measured by the BERS-2, revealed that there was a significant difference on all of the scales as well as the overall score. The children engaged in Wraparound services showed greater strengths than those receiving conventional services on Interpersonal Strength, Family Involvement, Intrapersonal Strength, School Functioning, Affective Strength, and the measure of overall behavioural and emotional strength, the BERS-2 Strength Index.

Placement of the children in the home/school/community was assessed via an interview question on the WFI-3.0. The two groups did not differ significantly in terms of the restrictiveness of their placement in these settings. With the exception of two participants involved in conventional services, all of the children were in the legal custody of either one or both of their biological parents, lived in their home communities, and attended the local school. These findings are supported by previous studies of children with behavioural difficulties which found a reduction in the number of children and youth in out-of-home placements (Burns et al., 1999; Eber et al., 1997; Eber et al., 1996; Goldman & Faw, 1999), and decreases in the use of restrictive school settings (Eber et al., 1997; Goldman & Faw, 1999) for youth engaged in Wraparound services. Fortunately, in the current study those children receiving conventional services also showed this positive trend.

In terms of showing more adaptive behavioural, emotional, social, and academic functioning, the results of the current study are consistent with previous research. Researchers have found that children and youth who have obtained Wraparound services have shown a decrease in overall problem behaviours (Burns et al., 1999; Goldman & Faw, 1999; Peterson et al., 2004a; Robbins & Collins, 2003; Schubauer & Hoyt, 2003), and improved behaviour adjustment and emotional functioning (Burns et al., 1999; Eber et al., 1996; Hagen et al., 2004; Pacchiano et al., 2003; Peterson et al., 2004a). In addition, previous research has also shown improvements in school functioning (Burns et al., 1999; Eber et al., 1997; Duckworth et al., 2001; Peterson et al., 2004a; Robbins & Collins, 2003), academic performance (Goldman & Faw, 1999; Pacchiano et al., 2003; Peterson et al., 2004b; Robbins & Collins, 2003; Schubauer & Hoyt, 2003), and social behaviour (Eber et al., 1996; Goldman & Faw, 1999; Robbins & Collins, 2003; Schubauer & Hoyt, 2003).

Why would Wraparound services appear to have such a positive effect? Current research on the development of resilience in children and youth who are identified as *at-risk* for developing emotional and behavioural disorders focuses on enhancing individual and external assets (Fergus & Zimmerman, 2005; Masten, 2001). External resources such as parental support, mentoring from supportive adults, and an effective education have shown to be essential to positive results across studies of resilience (Luthar et al., 2000). The success of creating these conditions that foster resilience and improve outcome is dependent upon the ability of collaborative teams to work together, share their expertise, and communicate effectively to coordinate services in order to meet the needs of children and their families. The essential elements of the Wraparound process incorporate these characteristics and foster the development of individual and external assets.

Several theories provide the foundation for an explanation of how a collaborative team that adheres to the value base of the Wraparound process can foster resilience and promote positive outcomes. The theory most consistent with Wraparound is that of environmental ecology (Munger, 1998). This theory assumes that children will function most successfully when the larger surrounding service system works competently with the microsystem of the family/home environment. Thus, in accordance with the value base of Wraparound, an understanding of the child's unique family, school, and community environment is essential for effective intervention. The successful collaboration of individuals working in each of the various systems is also essential. The proficient interactive teaming of these many system levels creates an individualized, strength-based plan for the child and family. "Effective Wraparound programs change the surrounding environment of the child and thus foster lasting changes that occur in individuals, families, and communities" (Burns, Schoenwald, Burchard, Faw, & Santos, 2000, p. 296).

Two additional interrelated theories that support the use of Wraparound in promoting positive outcomes are family systems theory (Christian, 2006), and the theory underlying strength-based approaches (Laursen, 2003) to service delivery. Family systems theory is based on the belief that "to serve children well, we must work with their families" (Christian, 2006, p. 12). As families are genuinely engaged as equal partners in the collaborative process, they develop ownership and commitment to the plan. They also learn skills which develop competence and self-reliance, which leads to personal empowerment (Walker & Shutte, 2004). Building upon this family involvement, a strength-based approach promotes the discovery of the child/family's inner capabilities and resources that can be used to improve functioning (Laursen, 2003). The utilization of a strength-based approach has assisted individuals in achieving

personal empowerment and efficacy, as well as increasing commitment to treatment (Brun & Rapp, 2001). This creates an effective partnership between the service provider and the youth (Hewitt, 2005; Tate & Wasmund, 1999). It also fosters hope by cultivating individual ability to cope with challenges, and decreases reliance on professionals (Laursen, 2000; Laursen, 2003).

The utilization of an individualized, strength-based, family driven, collaborative endeavour is directly related to one of the key components of effective collaborative processes previously discussed, namely interdependence and equality of the team members. Further success of the Wraparound approach can be directly related to the remaining fundamental components of successful collaborative processes (i.e., common goals, identified and measurable outcomes, problem solving, decision making, communication, reciprocal exchange of resources). Additionally, success of the Wraparound approach is supported by research on process variables that are critical for supporting team efforts and team effectiveness. Walker and Schutte (2004) examined the results of research on team process and effectiveness with a focus on teams similar to those comprised through a Wraparound process. These were, "teams that undertake complex, long-term projects or tasks; teams whose goals and work are largely self-determined; teams whose members are heterogeneous in terms of their demographic characteristics, experience, and/or expertise" (Walker & Schutte, 2004, p. 184). These researchers found that the two overarching characteristics of process in effective teams were cohesiveness and planning.

Team cohesiveness refers to the shared perceptions of the various members that the team is a viable group who can work collaboratively to achieve common goals (Walker & Schutte, 2004). Within the broader context of cohesiveness, team effectiveness has been linked to variables including working towards shared goals, the psychological safety of the team (i.e., trust, respectful communication), perceptions of equity (i.e., clear and fair decision making

procedures, shared resources), and the observation of team efficacy (i.e., progress towards goals) (Walker & Schutte, 2004). Effective team planning occurs when "teams adhere to a high-quality team planning process that is structured around specific goals with associated strategies and performance criteria" (Walker & Schutte, 2004, p.184). Throughout the planning process, generating multiple options during problem solving before making decisions has also shown to be related to team effectiveness (Walker & Schutte, 2003).

Research conducted by Fleming and Monda-Amaya (2001) who studied Wraparound team members "identified as experts in teaming" (p.158) also found that the essential process variables for team effectiveness were team goals, team outcomes, and team cohesion. Similarly, Hagen et al. (2004) examined youth involved in Wraparound services and found that "positive outcomes are associated with the youth and family team's ability to reach consensus on decisions and maintain cohesion during difficult times. Negative outcome is associated with lack of team consensus and cohesion, especially in the face of crisis situations" (p. 293).

In summary, as revealed in the current study and supported by previous research, participation in Wraparound services has shown to produce positive child and family outcomes. The Wraparound approach promotes the teaming of individuals from various system levels to work with, and for, the family with a focus on building upon the family's strengths and developing empowerment and independence. Wraparound, as operationalized by its ten essential elements, incorporates successful collaborative processes into its approach to service delivery and reflects the key components of effective teams. Positive child and family outcomes result from teams which utilize practices that concurrently promote both team effectiveness and the value base of the Wraparound process.

5.2.2 Adherence to Elements of Wraparound

Ensuring that the services being provided to children and their families have been sufficiently described and implemented is a critical step in establishing the effectiveness of an intervention (Epstein et al., 2003). Thus, treatment fidelity is an important factor in investigating the outcome of the various forms of service delivery. Therefore, the second research question within this study involved an examination of the extent to which the essential elements of the Wraparound process were adhered to. It was expected that Wraparound services would show higher fidelity to the basic elements of Wraparound than conventional services.

The results showed that, with the exception of Community-Based Services and Supports, this hypothesis was supported. Wraparound services showed greater fidelity to the essential elements of the Wraparound process than conventional services. This difference was significant for the following elements: Parent Voice and Choice; Cultural Competence; Strength-Based Services and Supports; Natural Supports; Continuation of Services and Supports; Outcome-Based Services and Supports; and Total Fidelity. Moreover, the Wraparound services demonstrated high fidelity to seven of the eleven elements and adequate fidelity to another element as well as to Total Fidelity. This is in direct contrast to the conventional services which displayed low fidelity to all of the elements, as well as Total Fidelity, with the exception of Community-Based Services and Supports which showed adequate fidelity. These results were expected due to the difference in fundamental values and practice principles utilized by the conventional model as compared to the Wraparound approach.

These results are consistent with earlier research on Wraparound fidelity. Suter et al. (2005) reviewed the results of studies which used the Wraparound Fidelity Index (WFI) as a

measure of adherence to the principles of Wraparound and found three types of conditions with distinct patterns of overall fidelity scores:

(1) non-wraparound conditions, with WFI scores between 60%-65%;

(2) typical wraparound conditions, with WFI scores of 72%-76%; and

(3) wraparound conditions with higher levels of support or that have been found to achieve superior outcomes, with WFI scores of 84%-87%. (p.14)

Wraparound services in the current study demonstrated 78% total fidelity to the elements, whereas conventional services demonstrated only 47% adherence. Recent research is supporting the hypothesis that higher fidelity to the elements of Wraparound is important to producing positive outcomes (e.g., Suter et al., 2003). Rast et al. (2004) found that children involved in High Fidelity Wraparound services showed significant improvements over those involved in Low Fidelity Wraparound as well as those engaged in the "usual child welfare and mental health services" (Rast et al., 2004, p. 312). In trying to understand the variability of these outcomes we can return to the components of team process and effective collaboration. Studies have shown a link between adherence to the principles of Wraparound and team effectiveness, with higher fidelity being associated with quality team planning (Fleming & Monda-Amaya, 2001; Walker et al., 2004; Walker & Schutte, 2005). Furthermore, researchers have found that higher quality planning is significantly related to greater individualization of plans and increased satisfaction of team members (Walker & Schutte, 2005). In applying the key components of effective teams, research shows that a "team is more likely to develop an individualized plan that effectively responds to a family's needs when the team adheres to a high quality, inclusive planning process, using practices that also promote team collaborativeness and the values of wraparound" (Walker & Schutte, 2005, p. 252).

Variability to fidelity can also be understood in the context of collaboration, and more specifically barriers to collaborative processes. Members on a team may be highly competent in employing effective team practices but may find themselves hindered by administrative and system barriers. For example, "excessive documentation requirements; rigidity around access to, and payment for, services and supports; or inconsistent support for the team plan among managers and supervisors…" (Walker & Schutte, 2004, p. 190) may thwart the efforts of the team.

5.2.3 Association between Adherence and Outcome

The third question within this study explored the association between adherence to the essential elements of the Wraparound process and child outcome measures. It was the intent of this research to investigate which elements are most important to producing positive outcomes. It was hypothesized that higher fidelity to the Wraparound elements would result in more positive child outcomes than lower fidelity.

Results from the investigation of child outcomes showed that, overall, those children engaged in Wraparound services displayed less maladaptive behaviour and more behavioural and emotional strengths than did those children receiving conventional services. It was also revealed that those engaged in the Wraparound process had higher fidelity to the elements of Wraparound than did those in conventional services. However, the current study showed mixed results with regard to the relationship between these two variables.

An examination of the direction and strength of the relationship between the elements of Wraparound and the three outcome measures showed surprising results. It was expected that higher fidelity would be negatively correlated with the measures of maladaptive behaviour (i.e., higher fidelity, less maladaptive behaviours) and positively correlated with the measure of

behavioural and emotional strength (i.e., higher fidelity, increased strengths). For those involved in Wraparound services this relationship was observed with statistical significance for the element of Youth and Family Team on all three outcome measures. Although not statistically significant, medium to strong relationships were also found in the expected direction between the outcome measures and the elements of Cultural Competence, Collaboration, and Outcome-Based Services. For those receiving conventional services, a significant association in the expected direction was found between the element of Community-Based Services and Supports and the BERS-2 Strength Index. This indicated that this element was positively associated with improved behaviour and emotional strength. There was also indication of a relationship between this element and decreased maladaptive behaviours. Strong correlations were also observed between the outcome measures and the elements of Continuation of Care and Flexible Resources; however, these were not statistically significant.

The remaining elements for both Wraparound and conventional services showed results that were exactly opposite the direction of relationship of the hypothesized outcome (with the exception of Strengths-Based Services and Natural Supports for those receiving conventional services). In other words, higher fidelity was related to increased maladaptive behaviours and decreased behavioural and emotional strengths. For example, for the Wraparound Group the element of Strength-Based Services and Supports was positively correlated with the BSI and CAFAS Total scores, and negatively correlated with the BERS-2 Strength Index. This would indicate that greater adherence to this element was related to higher impairment as measured by the BASC and CAFAS, and less behavioural and emotional strength as measured by the BERS-2. This was the direct opposite of the study's hypothesis that higher fidelity to the elements of Wraparound would result in less impairment and greater behavioural and emotional strengths.

For those receiving conventional services this relationship was statistically significant between the element of Individual Services and Supports and the Behavioural Strength Index (BSI; a measure of maladaptive behaviour), as well as between Total Fidelity and the two measures of maladaptive behaviour (i.e., BSI, CAFAS Total).

Unlike previous research that has found a link between overall adherence to the elements of Wraparound and positive child/family outcomes (e.g., Bruns et al., 2003; Hagen et al., 2004), this study did not find a consistently significant relationship. The findings suggest that fidelity to certain elements of Wraparound may be more important in the determination of positive outcomes than overall adherence to the service delivery. However, these results may more likely be due the small sample number of subjects that participated in this study. As mentioned, for those engaged in Wraparound services positive outcomes were associated with adherence to the following elements: Youth and Family Team, Cultural Competence, Collaboration, and Outcome-Based Services. Further research should involve a larger sample of subjects, and studies of a qualitative nature could provide a more in-depth analysis as to the impact of these elements on positive child and family outcomes.

The element of Youth and Family Team was the only element achieving statistical significance with strong correlations between all three outcome measures. This result indicated the importance of this element in producing positive outcomes. Research supports the fact that families play an essential role in the planning and decision making process (Fleming & Monda-Amaya, 2001). "When the voices of those who spend the most time with the student are heard and united, realistic and creative problem solving, positive school-family relationships, and the design of effective interventions are facilitated. The family and child should feel that it is their team and their plan" (Eber et al., 2002, ¶ 4). Goldman (1999) considered a well-supported team

consisting of the child, family, natural supports (e.g., extended family, friends, etc.), community services, and various agencies as the primary component of successful Wraparound planning. The elements of Collaboration (i.e., interdependence and equality of team members), Cultural Competence (i.e., sensitivity to the cultural differences of team members), and Outcome-Based Services (i.e., identified and measured outcomes) are key components of effective teams. Thus, the findings support the idea that positive child and family outcomes result from teams which utilize the elements of Wraparound that promote team effectiveness and engage in successful collaborative processes.

For those receiving conventional services, positive outcomes were associated with adherence to the following elements: Community-Based Services and Supports; Continuation of Care; and Flexible Resources. Community-Based Services and Supports was significantly associated with increased behavioural and emotional strengths on the BERS-2 and, although not statistically significant, showed a moderate correlation with decreased maladaptive behaviour. Two recent studies utilizing the WFI, BERS, and CAFAS found a similar significant relationship between fidelity to Community-Based Services and Supports and positive outcome (Bertoldo, Cox & Castillo, 2007; Taub & Breault, 2007). This element prescribes the team's support in promoting successful functioning in the family's natural environments (i.e., home, school, and community) and ensuring that the family is able to identify and access community resources. Connecting the family with community resources may increase positive outcomes by providing a wider support base, and fostering empowerment by strengthening individual ability to cope with challenges. Fidelity to the element of Flexible Resources may have contributed to positive outcomes by providing the means to utilize or develop individualized services or supports within the community. Positive outcomes associated with Continuation of Care may have resulted from

the perception of increased psychological safety of the team (i.e., unconditional commitment to support and serve the family). Previous research has shown that youths' perceptions of the unconditional commitment of the team was correlated with reduced problem and self-injurious behaviours, decreased depression, and increased overall satisfaction with services (Kendziora et al., 2001).

Due to the perplexing direction of the correlation between the remaining elements of Wraparound and the various outcomes measures, the relationship between Wraparound fidelity and child outcomes remains unclear. In fact, these contradictory findings were also observed by Bertoldo et al. (2007). For example, this study found positive significant relationships between the CAFAS Total score (i.e., maladaptive behaviours) and the elements of Parent Voice and Choice and Outcome-Based Services on the WFI. Adhering to all of the essential elements of Wraparound in coordinating services may not be the defining factor in producing positive outcomes. While it appears that Wraparound values may provide an effective framework for service delivery, there are likely other factors that are related to positive outcomes with regard to child functioning and behaviour (i.e., implementing the components that lead to effective teams and reducing barriers to successful collaborative processes). As mentioned previously, utilizing a larger sample in a replication of this study and conducting a comprehensive qualitative analysis of each of the elements of Wraparound may provide additional insight into the elements' influence on positive chid and family outcomes.

5.3 Limitations

The first limitation of the study was that the data cannot be generalized to students receiving Wraparound services in school divisions in other parts of the province due to the small number of participants. There were only 23 participants recruited for this study. Although

many agencies in Saskatchewan claimed that they used Wraparound, upon investigation there were few service providers utilizing this approach (however, they may have been using features of this approach). Thus, the sample size for this study was less than originally anticipated. As a result, the assumption that the differences between the two research groups were normally distributed could not be made. Consequently, non-parametric inferential statistics were employed in this study which resulted in less statistical power. The small sample size limited the scope of generalization since a larger sample is more representative of a population.

Second, the students recruited for the two research groups were not from the same school division, and were not matched for gender. The Control Group consisted entirely of males, whereas one-third of the Wraparound Group were males and two-thirds were females. Although the majority of students classified as having emotional or behavioural disorders are males (Smith, Polloway, Patton, Dowdy, Heath, McIntyre & Francis, 2006), future studies should make an effort to recruit equal numbers of males and females.

The third, and final limitation of this study, was that participants may not have been experiencing emotional and/or behavioural difficulties to the same degree. The criteria for participation in the current study was that subjects: demonstrated impaired functioning in the school/home; had been classified as *at-risk* on one of the Clinical Scales of the BASC; and had a behavioural goal in their personal program plan (PPP). This criteria did not ensure that all of the participants were experiencing difficulties to the same degree. Thus, a comparison between the groups without the establishment of a baseline may not have been as revealing as a pre-test and post-test design. This type of design could have more effectively examined improvement due to services provided.

5.4 Conclusion

The overarching objective of the current research was to assess effective ways of meeting the needs of, and promoting resiliency in, children and youth with Emotional and Behavioural Disorders (EBD). One person alone does not have the skills or the knowledge to be able to plan and implement effective programs. A pooling of knowledge, skills, and resources from professionals, parents, and children engaging in a meaningful and respectful process of collaborative consultation within an interactive team is needed. A team can better address the diverse challenges confronting these children and their families.

The Wraparound approach has proven to be an effective form of service delivery that produces positive outcomes for children with complex needs. Of particular importance to producing these outcomes are the elements of Youth and Family Team and Community-Based Services. Other important elements include Cultural Competence, Collaboration, Outcome-Based Services, Continuation of Care, and Flexible Resources. Not surprisingly, these elements have been shown to enhance team effectiveness. The results of this study suggested that in order to achieve positive child and family outcomes, school-based teams must build cohesiveness and engage in high-quality planning. Educators and other service providers need to be aware of the documented barriers and benefits of collaborative processes, skills in building effective teams, and the existing evidence-base for positive outcomes of the Wraparound process. This knowledge will allow educators and other service providers to assist students with EBD in meeting their academic, behavioural, and social needs, and ultimately in becoming more successful members of society.

5.5 Implications for Practice

Students with Emotional and Behavioural Disorders (EBD) present a challenge to providing effective educational services that meet their academic, behavioural, and social needs (Bruns et al., 2004; Eber et al., 2002). Given the negative life outcomes consistently exhibited by these children and youth (Conway, 2003; Kauffman, 2005), it is imperative that they receive empirically validated interventions and services to meet their complex needs. Although a limited number of subjects participated in this study, its results still have practical implications at all educational levels.

This study showed strong significant correlations between the element of the Youth and Family Team and all three outcome measures, indicating the potential importance of this element in producing positive outcomes. School-based teams are an ever-increasing means of support for students with disabilities. The success of meeting the needs of students with EBD is dependent upon the ability of teachers, parents, administrators, counsellors, and other pertinent individuals, to communicate effectively, share their expertise, and work together to coordinate services. In order to prioritize the Youth and Family Team and enhance the collaborative team process, team cohesiveness and skills in high-quality planning must be developed.

Building perceptions of team cohesion is imperative to the effectiveness of the Youth and Family Team. Respectful communication can be fostered by skilled facilitators trained in conflict resolution, team consensus regarding ground rules for communicative behaviour, and commitment to maintain a focus on common goals (Walker & Schutte, 2003). Perceptions of equity can be increased by ensuring that team members have meaningful input which leads to equitable decision-making (Walker & Schutte, 2004). Due to the importance of family participation and partnership on the team, it is essential to include practices for encouraging the

family to share their views. Such techniques may include, "reflective listening and summarization of family input, increased 'checking in' with family and youth, allowing family first and last 'say' during discussion, and providing family with extra 'votes' during prioritization of goals" (Walker, 2007, p. 3). Duckworth et al. (2001) suggested that family and school relations were improved through a "continuing pledge by a behavioural support team to improve the lives of children and their parents" (p. 59). By utilizing these practices team cohesiveness can be enhanced and thus strengthen the Youth and Family Team.

This study found that the presence of a strong Youth and Family Team was significantly associated with positive outcomes on all measures. Effective teams utilize high-quality planning processes. Quality services and supports can be developed through the use of a planning template which allows for the identification and documentation of measurable goals (Walker & Schutte, 2004). Walker and Schutte (2004) proposed that utilization of a planning template further clarifies purpose and accountability if it requires the team to "record performance criteria for each goal, the strategies used to meet the goal, the tasks required for implementing the strategies, and the people responsible for carrying out the tasks" (p. 189). Saskatchewan Learning (2004) suggested that appropriate goals are SMART: Specific, Measurable, Achievable, Realistic, and Time Related. Higher quality goals may be produced by generating multiple options during problem solving through activities such as brainstorming (Walker & Schutte, 2004). In addition, intermediate goals that are broken down into smaller components will make the long term goals more manageable and, upon attaining these goals, aid in increasing perceptions of team efficacy (Walker & Schutte, 2004).

Successful teamwork involves an awareness of effective features and barriers to collaboration, a philosophy that values and encourages the process and specific skills in conflict

management, communication, and problem-solving. Training and practice in collaborative processes is essential for teachers and should be included in the educational curriculum. Furthermore, children and youth with EBD have complex needs that intersect human service agencies (e.g., education, juvenile justice, mental health, child welfare, etc.). Education with regard to the roles of the various agencies, services and supports available, and methods of interagency collaboration is greatly needed in order to effectively serve the families who have needs that cut across these boundaries. Rast and Bruns (2003) suggested that in order to have a greater impact on the delivery of services, training should pass beyond the general values of collaboration and focus on specific skills. For example, in addition to coaching and performance-related supervision, "higher intensity training that presents videotaped interactions, incorporates role plays, and focuses on specific performance indicators will improve [the] training's impact…" (Rast & Bruns, 2003, p. 23).

In summary, the current research supports that in prioritizing the Youth and Family Team more positive outcomes will be observed. This can be accomplished by promoting team cohesiveness and high-quality team planning, and by engaging in training in collaborative processes. Further support for the Youth and Family Team must come from the existing organization and system levels.

Effective teamwork alone is not enough to ensure that collaborative teams will be successful. Support from the organizational and system contexts within which they work is also required if successful teamwork is to be achieved and maintained. Necessary conditions of support for teams at the organizational level includes commitment to the core values of collaboration, training opportunities, supervision, empowerment in decision making, and the provision of working conditions that facilitate high quality work (Walker, Koroloff & Schutte,

2003). Duckworth et al. (2001) recommended that, "creative and positive administrative leadership" (p. 59) is also required at this level. Conditions at the system level necessary to provide teamwork support include the encouragement of interagency cooperation, consent for autonomy and incentives for the development of effective services, and support for fiscal policies that permits the flexibility needed for the individualization of services (Walker et al., 2003). Koroloff, Schutte and Walker (2003) stressed the importance of the interrelationships across the team, organizational, and system levels:

> Traditionally, we think of people at the service delivery level as accountable for the quality of the services that they provide. When programs fail to deliver desired outcomes, the blame is often laid at the provider level. However, as our research has made clear, high quality work in ISP [Individualized Service/Support Planning] cannot succeed where the necessary organizational and system level supports are lacking. (p.11)

5.6 Implications for Future Research

Further research is needed to examine the association between fidelity to the elements of Wraparound and various outcome measures in order to assess which elements are most beneficial to the child and family. Additional research with larger sample sizes may yield more significant results. It would be beneficial to match participants on gender, age, and diagnosis while employing a study utilizing a pre-post test design. This would allow for a more in-depth and meaningful evaluation of the affects of the services provided. To further this understanding, it would be valuable to document and analyze the differences in the services that the children received. In addition, an in-depth qualitative analysis of the individual elements of the Wraparound process may foster a greater depth of understanding into the variables that produce more positive child and family outcomes.

Although the use of school-based teams have increased, little empirical information in the field of education is available for guiding the development of a team, exploring the processes teams undergo during meetings, and assessing team interaction (Fleming & Monda-Amaya, 2001). Such information would provide important insight into the process variables that are essential for team effectiveness and enhance the performance of school-based teams. Further research is also needed in the area of organizational and system level supports that are necessary to promote effective collaborative processes on school-based teams.

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APPENDIX A

REQUEST TO CONDUCT RESEARCH

Dear _____,

Please find attached a confidential draft copy of my proposal. Thank you very much for your time this morning and your willingness to look at my research.

In short, collaborative processes have been emerging in the research literature as a critical characteristic of exemplary schools that have been effectively meeting the needs of students with disabilities. This research focuses on a model of collaboration called Wraparound. The results of this research will allow for examination of the critical components of effective collaboration and service provision. Pertinent information will be provided for practical applications within the education system that will allow for the creation of effective plans that can meet the various needs of our students.

Please note that this proposal has not yet been approved by the ethics committee. It has however, been awarded the Canada Graduate Scholarship from Social Sciences and Humanities Research Council of Canada (SSHRC). Upon approval in principle from your school division I will be making any necessary changes before proceeding to ethics.

In order to make this research as practical and useful as possible to the _____ School Division I would welcome suggestions, questions, and concerns in order to make any necessary changes. You can contact me directly at:

Denise Heppner, M.Ed. (in progress)
Home phone: (306) 945-2267
Cel phone: (306) 270-2255
Email: rsh133@mail.usask.ca

You can also reach my thesis supervisor:

Teresa Paslawski, PhD
Educational Psychology and Special Education
College of Education, University of Saskatchewan
Phone: (306) 966-5262
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Thank you so much for your time! I look forward to hearing from you.

Denise Heppner

WRAPAROUND RESEARCH PROPOSAL

During the last 10-20 years, it has been a challenge to provide effective educational services for children with emotional and behavioural disabilities (Bruns, Burchard, Suter, Leverentz-Brady, & Force, 2004). Does one Special Education teacher alone have the skills or the knowledge to create and implement effective intervention plans that can meet the academic, emotional, behavioural, and social needs of children and youth with mental health disabilities?

Research Proposal:

Context: The research I am proposing for my Master's thesis addresses the ultimate goal of education which is for all students to achieve full and meaningful citizenship in society (Saskatchewan Education, 1999). The goals of competence in basic skills, valuing and independently engaging in lifelong learning, understanding and effectively relating to others, developing a positive self-concept, practicing a positive life style, cultivating awareness of career interests and opportunities, and becoming an active member of society are essential to the development and quality of life for students (Saskatchewan Education, 1999). It is a challenge to actualize the goals of education for students with disabilities.

One person alone does not have the skills or the knowledge to be able to plan and implement effective educational programs (Snell & Brown, 2000). Collaborative processes have been emerging in the research literature as a critical characteristic of exemplary schools that have been effectively meeting the needs of students with disabilities (e.g., Friend, 2005; McLaughlin, 2002). A pooling of knowledge, skills, and resources from professionals, parents and students engaging in a meaningful and respectful process of collaborative consultation within an interactive team is needed to address the diverse challenges confronting these students and their families (Thomas, Correa, & Morsink, 2001).

The Wraparound model is a multidisciplinary team approach that focuses on the child/family strengths in order to generate an individualized support plan which utilizes services within the community and draws upon natural supports for children and youth (Bruns et al., 2004). Wraparound "promotes utilization of the least restrictive, least intrusive, developmentally appropriate interventions in accordance with the strengths and needs of the student and family within the most normalized environment and an overall system of care" (Peterson, Canfield, & Tvrdik, 2004, p.26). This model is based on ten essential elements: services must be collaborative in nature, community-based, focused on family strengths, culturally appropriate, team-driven, outcome-based, as well as ensure family voice in decision making, have access to flexible funding, include a balance of formal and informal services, and provide unconditional care (Burns & Goldman, 1998).

Multiple studies on Wraparound have revealed substantial improvements in academic, emotional, behavioural, and social functioning for children and youth with emotional and behavioural disabilities (e.g., Peterson et al., 2004; Kendziora, Bruns, Osher, Pacchiano, & Mejia, 2001). However, it has only been recently that a consensus and operationalization of definition and elements of Wraparound has been reached (Burns & Goldman, 1998). This ambiguity has led to varied implementation strategies by service providers, and documentation

of research studies has been focused on outcome without consideration of adherence to the basic principles of Wraparound, making interpretation difficult (Bruns et al., 2004). Recently, a measure has been developed which is designed to assess service providers' fidelity (i.e., adherence) to the elements of Wraparound (Bruns et al., 2004). There is, however, a gap in the research literature with regards to the link between fidelity to the Wraparound process and student/family outcomes. Such studies would impact service provision by allowing for the investigation of the effective elements of Wraparound and the critical components of collaboration in general.

Participants: Four sites providing services for families recruited for the study, two sites that use the Wraparound model for service provision and two that do not. Five families from each site will be examined.

Data Collection

A summary of the method of data collection is provided in the following table.

Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005; UMDNJ, 2005b) *Student outcome data	Multiple response scale to be completed by a staff member based on information collected as part of typical clinical services *Time to administer: 10 minutes*
Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004; UMDNJ, 2005a) *Student outcome data	Likert scale to be completed by teachers, parents, counsellors, or other persons knowledgeable about the student *Time to administer: 10 minutes*
Eyberg Child Behaviour Inventory (ECBI; Eyberg, 1999; UMDNJ, 2005c) *Student outcome data	Likert scale to be completed by parents and teachers *Time to administer: 5 minutes*
Wraparound Fidelity Index (WFI; Bruns et al., 2004; WERT, 2005) *Data on adherence to the elements of Wraparound	Likert scale, interviews performed by researcher with family's resource facilitator, caregiver, youth (min. age 11) *Time to administer: 15-25 minutes*

Measures for student outcome may change after consultation with facilitator.

Contributions to the Advancement of Knowledge: The results of the data analysis will allow for examination of the critical components of effective collaboration and service provision to students with emotional and behavioural disabilities, as well as the limiting factors to its success. This will result in pertinent information for practical applications within the education system that will allow for the creation of effective plans that can meet the various needs of our students, and ultimately will assist all students in becoming successful members of society.

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APPENDIX B

BEHAVIOURAL RESEARCH ETHICS BOARD CERTIFICATE OF APPROVAL

UNIVERSITY OF SASKATCHEWAN

Behavioural Research Ethics Board (Beh-REB)

Certificate of Approval

PRINCIPAL INVESTIGATOR	DEPARTMENT	BEH#
Teresa Paslawski	Educational Psychology and Special Education	07-65

INSTITUTION(S) WHERE RESEARCH WILL BE CONDUCTED (STUDY SITE)
University of Saskatchewan
Saskatoon SK

STUDENT RESEARCHERS
Denise Heppner

SPONSOR
SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL OF CANADA (SSHRC)

TITLE
Effective Collaborative Practices: The Wraparound Approach: Meeting the Needs of Students with Emotional and Behavioural Disorders

APPROVAL DATE	EXPIRY DATE	APPROVAL OF
16-Apr-2007	15-Apr-2008	Application Consent Form Assent Form

CERTIFICATION
The University of Saskatchewan Behavioural Research Ethics Board has reviewed the above-named research project. The proposal was found to be acceptable on ethical grounds. The principal investigator has the responsibility for any other administrative or regulatory approvals that may pertain to this research project, and for ensuring that the authorized research is carried out according to the conditions outlined in the original protocol submitted for ethics review. This Certificate of Approval is valid for the above time period provided there is no change in experimental protocol or consent process or documents.

Any significant changes to your proposed method, or your consent and recruitment procedures should be reported to the Chair for Research Ethics Board consideration in advance of its implementation.

ONGOING REVIEW REQUIREMENTS
In order to receive annual renewal, a status report must be submitted to the REB Chair for Board consideration within one month of the current expiry date each year the study remains open, and upon study completion. Please refer to the following website for further instructions:
http://www.usask.ca/research/ethics_review/

John Rigby, Chair
University of Saskatchewan
Behavioural Research Ethics Board

Signature Date Apr. 1 16/07

Please send all correspondence to:

Ethics Office
University of Saskatchewan
Room 306 Kirk Hall, 117 Science Place
Saskatoon SK S7N 5C8
Telephone: (306) 966-2084 Fax: (306) 966-2069

APPENDIX C

PREPARED SCRIPT FOR INITIAL REQUEST FOR PARTICIPATION

You and your child are invited to participate in a study being conducted through the University of Saskatchewan. The purpose of this study is to look at how services are delivered to students who are struggling with their behaviours or their emotions.

This project will involve a brief (15 minute), confidential telephone interview with yourself. For most of the questions asked you can answer "Yes," "Sometimes" or "Somewhat," or "No."

The purpose of this interview is to gain information on the services and supports your child is receiving. All of the information you would provide would be strictly confidential and would be known only to myself. Only summarized information will be reported.

It will be your choice to be a part of this study. If you choose to participate you may refuse to answer individual questions during the interview. You may also stop the interview at any time, for any reason without penalty of any sort. Your child's class work or continuation of services will not be affected if you choose not to participate.

I would really appreciate your willingness to take the time to help me because your opinions are very important! This study will help me look at the different parts of teamwork. I want your feedback so that future services can be improved.

Please let me know if you are interested in participating in the study.

APPENDIX D

INFORMATION LETTER AND CONSENT FORM

INFORMATION LETTER AND CONSENT FORM

DEAR PARENT OR GUARDIAN,

You and your child are invited to participate in a study called: *Effective Collaborative Practices: The Wraparound Approach: Meeting the Needs of Students with Emotional and Behavioural Disorders*. Please read this form carefully. Feel free to ask any questions you might have.

Purpose and Procedure: The purpose of this study is to look at how services are delivered to students who are struggling with their behaviours and/or emotions.

If you agree to be a part of the project you will take part in a short interview (15 minutes). For most of the questions asked you can answer "Yes," "Sometimes" or "Somewhat," or "No." The questions will be about the services and supports your child is receiving.

Your opinions are very important and we would really appreciate your willingness to take the time to help us. If you are interested in participating in the study, we would ask you to fill in the form below and return it to your child's teacher.

Possible Benefits: This study will help us to look at the different parts of teamwork. We want your feedback so that future services can be improved.

Possible Risks: You may have concerns that this information will be shared with others. However, anything you tell us will be kept private and will not be shared with anyone else other than the researchers. The interview itself is quite short and you may take breaks if you feel the need to do so. The school counsellor will be made aware of the study should the need for his/her services be required.

Confidentiality: You will be given an identification number so that no one will know what you have said. Anything you tell us will be kept private and will not be shared with anyone other than the researchers. At the end of the study all of the responses will be shared as a group. At no point will you be identified.

Storage of Data: All of your information will be safely stored by Dr. Paslawski. The only people who will be allowed to see your information will be the researchers from this study. After 5 years everything will be destroyed.

Right to Withdraw: It will be your choice to be a part of this study. If you choose to participate you may refuse to answer individual questions during the interview if you so desire. You may also stop the interview at any time, for any reason without penalty of any sort. Your child's class work or continuation of services will not be affected if you choose not to participate.

Questions: If you have any questions about the study please feel free to ask at any point. The researchers' numbers are below. This study has been approved on ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on April 16, 2007. If you have questions about your rights as a participant you can call the Ethics Office (966-2084). Out of town participants may call collect.

A summary of the results of this study will be shared with the Prairie Spirit School Division and the Saskatchewan Rivers School Division. You may contact the researchers for information on the results of this study if you are interested.

Researchers:

Denise Heppner, M.Ed. (in progress)
Educational Psychology and Special Education
College of Education, University of Saskatchewan
Ph: (306) 945-2267
Email: rsh133@mail.usask.ca

Dr. Teresa Paslawski
Assistant Professor
Educational Psychology and Special Education
College of Education, University of Saskatchewan.
Ph: (306) 966-5262
Email: teresa.paslawski@usask.ca

Consent to Participate: I have read and understood the description provided above. All of my questions have been answered. I consent to allowing my child and myself to participate in the study described above. I understand that I may withdraw this consent at any time. A copy of this consent form has been given to me for my records.

_____ _____

(Name of Participant) (Date)

_____ _____

(Signature of Participant) (Signature of Researcher)

Decline to Participate: I have read and understood the description provided above. All of my questions have been answered. I DO NOT consent to allowing my child or myself to participate in the study described above.

_____ _____

(Name of Participant) (Date)

_____ _____

(Signature of Participant) (Signature of Researcher)

APPENDIX E

INSTRUCTIONAL LETTER FOR COMPLETING STUDENT OUTCOME MEASURES

For the attention of: _____

THANK YOU SO MUCH FOR TAKING ***15 MINUTES*** OF YOUR TIME TO ANSWER THESE QUESTIONS SO THAT I CAN COMPLETE THE RESEARCH FOR MY THESIS! Please do not hesitate to contact me if you have questions regarding the instructions or the measures themselves.

Sincerely,

Denise Heppner
Masters of Educational Psychology and Special Education (in progress)
College of Education
University of Saskatchewan, Saskatoon, SK
Phone: (306) 945-2267, (306) 270-2255
Email: dem114@mail.usask.ca

Student's Name: _____

Student's Date of Birth: _____/_____/_____
Month Day Year

Grade: _____

Attendance: Please estimate how many hours a week the student attends school (check one):

_____ More than 20 total hours per week

_____ 10-20 total hours per week

_____ Less than 10 total hours per week

****PLEASE FILL OUT THE ATTACHED FORMS, PLACE ALL INFORMATION IN THE STAMPED ENVELOPE PROVIDED, AND PLACE THEM IN THE MAIL.**

Form 1: Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992)

On both sides of this form are phrases that describe how children may act. Please read each phrase and mark the response that describes how this child has acted over the last **six months**. If the child's behaviour has changed a great deal during this period, describe the child's recent behaviour.

Circle **N** if the behaviour **never** occurs.
Circle **S** if the behaviour **sometimes** occurs.
Circle **O** if the behaviour **often** occurs.
Circle **A** if the behaviour **almost always** occurs.

Form 2: Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004)

This scale contains a series of statements that are used to rate a student's behaviours and emotions in a positive way. Read each statement and mark the number that corresponds to the rating that best describes the student's status over the past 3 months. Rate each statement to the best of your knowledge of the student. Rate all 52 items by the following criteria:

3 = If the statement is very much like the student
2 = If the statement is like the student
1 = If the statement is not much like the student
0 = If the statement is not at all like the student

Form 3: Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005)

The CAFAS consists of a menu of behavioural descriptors that describe the child.

There are 8 subscales. For each subscale, read through the items at each level, starting at the SEVERE IMPAIRMENT level, until you find a description of the child. Circle the description and immediately move on to the next subscale (in other words, you do not need to continue reading the following levels once you have circled a behavioural descriptor).

APPENDIX F

ASSESSMENT SCALES AND SUBSCALES

Assessment Scales and Subscales

Scale	Subscales
Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2005)	School/Work Role Performance, Home Role Performance, Community Role Performance, Behaviour Toward Others, Mood/Emotions, Self-Harmful Behaviour, Substance Use, Thinking
Behavioural and Emotional Rating Scale (BERS-2; Epstein, 2004)	Interpersonal Strength, Family Involvement, Intrapersonal Strength, School Functioning, Affective Strength, Career Strength
Behaviour Assessment System for Children (BASC; Reynolds & Kamphaus, 1992)	Externalizing Problems Composite (Aggression, Hyperactivity, Conduct Problems), Internalizing Problems Composite (Anxiety, Depression, Somatization), School Problems Composite (Attention Problems, Learning Problems), Other Problems Composite (Atypicality, Withdrawal), Adaptive Skills Composite (Adaptability, Leadership, Social Skills, Study Skills), Behavioural Symptoms Index